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# AGRICULTURAL FINANCE Outlook

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Many persons provided valuable help in collecting survey data and other information used in this report. These included officers and other employees of commercial banks and the American Bankers Association, agricultural loan officers of life insurance companies, economists of the Federal Reserve System, State Directors and other employees of the Farmers Home Administration, presidents and other officers of the Federal Land Banks and Federal Intermediate Credit Banks, employees of the Farm Credit System and the Extension Service, and officials of the credit Corporations of farm machinery manufacturing companies.

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# AGRICULTURAL FINANCE OUTLOOK

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This has been a year of moderate change in farm income, continued but modest gains in farmland values, and a large growth in farm debt. As has been the case in recent years, net farm income and the value of farm assets appear headed in different directions in 1977—total net farm income is forecast to drop slightly from the \$20.0 billion of 1976; asset values rose further, by \$59 billion. A \$16-billion rise in debt lowered the equity gain to \$43 billion, for the fourth largest gain on record.

The contrast between these two measures of the well-being of farmers—their income and their wealth—is likely to be less pronounced in 1978 as net farm incomes continue to stabilize and farmland values level off or rise less rapidly. Debt growth is expected to continue to rise strongly in 1978.

Farm income in 1977 partly reflects much less favorable returns for cash grain producers, following several good income years prior to 1977. U.S. and world production of most grains in 1976/77 outran use and carryover stocks increased. The value of U.S. exports, a major factor in the high incomes of grain producers in recent years, has slackened. Federal price and income support activities under the Food and Agriculture Act of 1977 will be a major factor in supporting prices and incomes for several crops in 1977-78. While crop prices have dropped, prices of most farm inputs are continuing to rise, although less rapidly.

Incomes of farmers other than cash grain producers changed less dramatically. Net returns to livestock producers improved a little and further gains appear likely next year. Livestock, poultry, and dairy producers, in general, are among the beneficiaries of the abundant feed supplies at lower prices.

Farm indebtedness increased rapidly during 1977. The estimated \$16-billion rise will be a record by a sizable margin. All institutional lenders have shown large expansions in their loan holdings, and funds provided by sellers of farm inputs jumped. Emergency loans of the Farmers Home Administration probably have risen by more than a half, reflecting crop damage or drought conditions in some areas that were not handled by the private lenders.

Renewals and extensions of loans have been much more common in 1977 than in 1976, particularly at banks. To bring about these longer terms,

and provide greater lender security, many nonreal estate loans were reported to have been converted to real estate secured loans. Because of the rise in farm real estate values over the years—a rise which has continued in 1977—many owners have equities in their land that can be used as security for their borrowings. About 5 percent of present borrowers were viewed by lenders as having become unsatisfactory credit risks and would not be granted continued financing next year, if current conditions continue. However, lenders reported that this proportion was only a little larger than normal. Lenders generally appear to be working with their borrowers who have developed repayment problems.

Bankers said that the overall quality of their farm loan portfolios averaged as strong in 1977 as in the previous year. Deterioration in loan quality occurred among borrowers in cash grain and beef cattle areas. However, improvements were indicated in the incomes, net worths, and repayment capacities of borrowers producing dairy products, other livestock (primarily hogs), and tobacco. Bankers believed that the quality of their farm loan portfolios in 1977 averaged somewhat better than that of their other business loans. However, they anticipated some decline in the quality of

their farm loan portfolios during 1978.

Currently, most lenders anticipate a slowing in the increase in land prices, but few anticipate declines. Land values are forecast to rise by 6 percent, compared with about 9-11 percent in 1977. If slower gains become a reality there will be less desire to purchase land as a hedge against inflation and poorly made farm loans are likely to result in losses rather than being shored up by gains in land values during the period of the loan. In the winter and spring, when payments become due on 1977 loans and plans are being made for financing 1978 production, it will become more evident how successfully those farmers with smaller cash flows and larger debts have handled their situations.

Farm debts are projected to increase as rapidly in 1978 as this year, with real estate loans rising a little more rapidly in the year and nonreal estate a little less. Some of the increase in real estate debt in 1978, as this year, will be from the refinancing of short-term debt into real estate debt. Because of the relatively low farm product prices, farmers will probably borrow more for operating purposes, but they are expected to curtail their capital outlays. Personal consumption and other cash uses of funds are also expected to be curtailed.



# BALANCE SHEET OF THE FARMING SECTOR, JANUARY 1, 1978

The value of farm assets is expected to increase by \$59 billion or 9 percent during 1977 (table 1). About \$49 billion of the gain will be farm real estate values—a 10 percent increase. In the previous year real estate values increased 16 percent. The values of physical assets other than farmland are expected to increase only slightly. Machinery and motor vehicles values will be up primarily because of higher prices. The value of grains stored on farms will be up substantially primarily because larger quantities more than offset lower

prices. In the case of livestock, numbers on farms have dropped further but stronger prices at the end of 1977 will offset part of the reduction in numbers.

Unrealized capital gains on farm real estate and other physical farm assets are estimated at \$55 billion for 1977, compared to about \$20 billion in net farm earnings. Each year, since 1970, the appreciation in asset values has been greater than net farm earnings. For the 7 year period since 1970, unrealized capital gains have been \$380 billion dollars, total farm income was \$157 billion.

Table 1—Balance sheet of the farming sector, January 1, 1969-78

Item	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978 <sup>1</sup>
<i>Billion dollars</i>										
Physical assets:										
Real estate assets .....	209.2	215.9	223.9	241.4	271.0	335.4	378.7	429.1	497.2	546.9
Nonreal estate assets <sup>2</sup> .....	71.8	76.5	79.1	86.9	100.6	122.3	118.9	132.0	140.6	148.0
Total physical assets .....	281.0	292.4	303.0	328.3	371.6	454.7	497.6	561.1	637.8	694.9
Financial assets:										
Commercial bank deposits and currency .....	11.5	11.9	12.4	13.2	14.0	14.9	15.1	15.6	15.9	16.4
Other financial assets <sup>3</sup> .....	10.6	10.9	11.2	11.7	12.6	13.6	14.8	16.1	17.2	18.3
Total financial assets .....	22.1	22.8	23.6	24.9	26.6	28.5	29.9	31.7	33.1	34.7
Total farm assets .....	303.1	315.2	326.6	353.2	398.2	486.2	527.5	592.8	670.9	729.6
Debt claims:										
Real estate debt .....	27.4	29.2	30.3	32.2	35.7	41.3	46.3	51.1	56.6	64.5
Nonreal estate debt .....	20.4	21.1	22.2	24.6	27.8	32.1	35.2	39.4	45.1	51.7
CCC nonrecourse loans .....	2.7	2.7	1.9	2.3	1.8	.7	.3	.3	1.0	2.5
Total debt claims on farm assets .....	50.5	53.0	54.4	59.1	65.3	74.1	81.8	90.8	102.7	118.7
Equity: .....	252.6	262.3	272.1	294.1	332.9	412.1	445.7	502.0	568.2	610.9
<i>Percent</i>										
Debt to asset ratio .....	16.7	16.8	16.7	16.7	16.4	15.2	15.5	15.3	15.3	16.3
Debt to equity ratio .....	20.0	20.2	20.0	20.1	19.6	18.0	18.4	18.1	18.1	19.4

<sup>1</sup> Preliminary estimate. <sup>2</sup> Includes machinery and motor vehicles, household furnishings and equipment and inventories of crops (including crops held as security for CCC loans) and livestock. <sup>3</sup> Includes U.S. savings bonds and investments in farmer cooperatives. Does not include financial claims on specific nonfarm assets such as holdings of common stocks as data on these claims are not available.

## Farm Real Estate Values

Farmland values in 1977 are expected to increase by an average of 9 to 11 percent for the Nation, according to a recent survey of commercial lenders. Most of this increase occurred during the first half of the year. But, thus far during the second half, increases have slowed and are expected to continue to be very moderate, even declining in

some States. Declines are expected because of the current stress upon farm cash-flow from the cost-price squeeze and because some farmland prices may have already advanced beyond that supported by expected income.

Current land prices can continue to draw strength from (1) the recent good income years in

the North Central States, resulting in strong financial positions for many farmers, (2) scarcity of listings, (3) inflation, (4) outside investment, (5) off-farm income, (6) heavy investment in large farm machinery, fueling the farm enlargement process, and (7) new legislation providing increased governmental farm income support.

No particular region of the U.S. is expected to far exceed the rest of the Nation in land value increases. This is unlike the years since 1972 when the Corn Belt annually led the advance. Between March 1, 1972 and February 1, 1977 land values in the Corn Belt increased an average of 176 percent, while the national average increased 114 percent. During this period, land values in Iowa rose by 225 percent and in Illinois by 204 percent. For the year

ending November 1, 1976, Illinois land values increased by an average of 41 percent, tying a South Carolina record set in 1920. However, the problems of excess supply and low commodity prices, which arose in the cattle producing Western States four years ago, and in the wheat producing Plains States last year, have now also appeared in the Corn Belt.

Between now and next February very little, if any, increase in land values are expected in the Corn Belt. Reports even indicate that the highest priced land in parts of Illinois, Iowa and Indiana has already dropped sharply. These developments are reportedly also being reflected in declining cash rental rates.

### Farm Debt Growth

Farm debt increased strongly during 1977 and all lender groups in the survey expected the growth to continue next year. Real estate debt is expected to increase \$7.9 billion and nonreal estate \$6.7 billion during 1977 exceeding increases of previous years (figure 1). Loans by farm machinery dealers increased sharply again in 1977. Commodity Credit Corporation (CCC) price support loans are expected

to more than double this year as Federal Government involvement in price and income support becomes greater under the new farm act. Farm borrowing increases in 1977 moved out of the narrow range of the last several years to a point half again higher than the 1973-76 level.

The survey of commercial banks indicated that borrower demand in 1977 has been strongest for

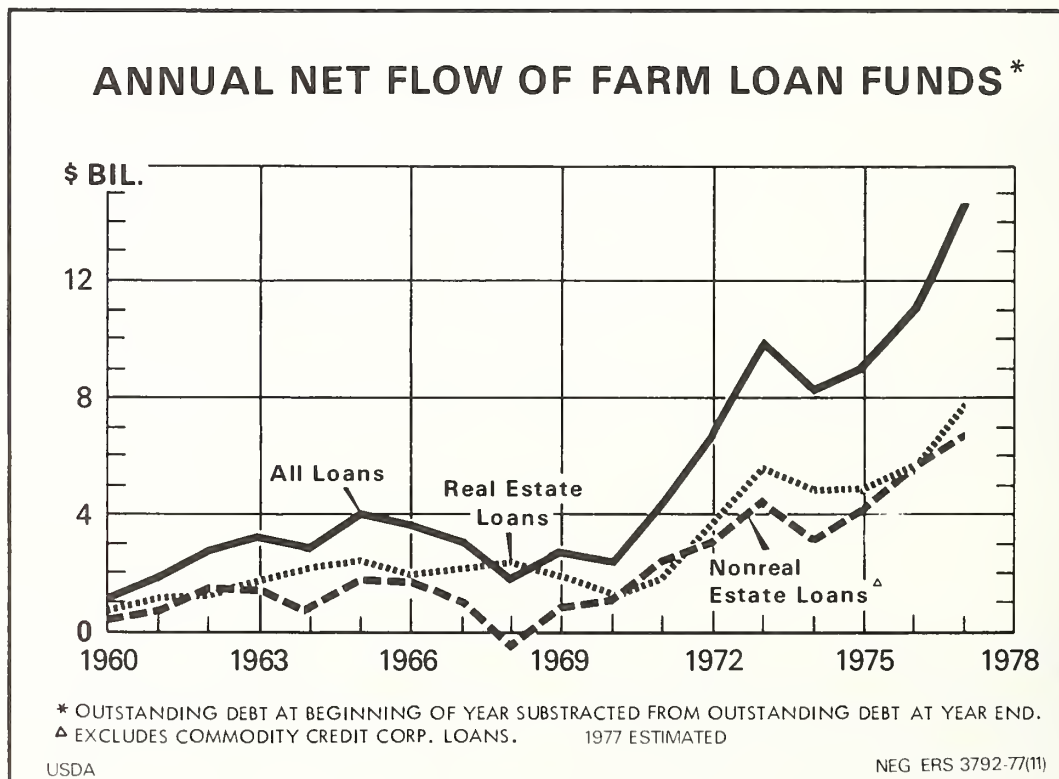


Figure 1



Table 2—Total farm debt outstanding, January 1, 1968-1978

Year	Real estate debt	Nonreal estate debt excluding CCC loans	Price support and storage loans made or guaranteed by CCC	Total excluding CCC loans	Total including CCC loans
<i>Million Dollars</i>					
1968 .....	25,142	20,834	1,420	45,976	47,396
1969 .....	27,397	20,387	2,671	47,784	50,455
1970 .....	29,183	21,168	2,676	50,351	53,027
1971 .....	30,346	22,262	1,876	52,608	54,484
1972 .....	32,208	24,644	2,262	56,852	59,114
1973 .....	35,758	27,794	1,793	63,552	65,345
1974 .....	41,253	32,134	750	73,387	74,137
1975 .....	46,288	35,226	319	81,514	81,833
1976 .....	51,069	39,406	358	90,475	90,833
1977 .....	56,590	<sup>2</sup> 45,061	1,012	101,651	102,663
1978 <sup>1</sup> .....	64,490	51,730	2,492	116,220	118,712
<i>Dollar Change</i>					
1968-73 .....	10,616	6,960	373	17,576	17,949
1973-78 .....	28,732	23,936	699	52,668	53,367
1973-74 .....	5,495	4,340	-1,043	9,835	8,792
1974-75 .....	5,035	3,092	-431	8,127	7,696
1975-76 .....	4,781	4,180	39	8,961	9,000
1976-77 .....	5,521	5,655	654	11,176	11,830
1977-78 .....	7,900	6,669	1,480	14,569	16,049
<i>Percent Change</i>					
1968-73 .....	42.2	33.4	26.3	38.2	37.9
1973-78 .....	80.4	86.1	39.0	82.9	81.7
1973-74 .....	15.4	15.6	-58.2	15.5	13.5
1974-75 .....	12.2	9.6	-57.5	11.1	10.4
1975-76 .....	10.3	11.9	12.2	11.0	11.0
1976-77 .....	10.8	14.4	182.7	12.4	13.0
1977-78 .....	14.0	14.8	146.2	14.3	15.6
<i>Percentage Distribution of Debt</i>					
1968 .....	53.0	44.0	3.0	97.0	100.0
1973 .....	54.7	42.6	2.7	97.3	100.0
1974 .....	55.7	43.3	1.0	99.0	100.0
1975 .....	56.6	43.0	0.4	99.6	100.0
1976 .....	56.2	43.4	0.4	99.6	100.0
1977 .....	55.1	43.9	1.0	99.0	100.0
1978 .....	54.3	43.6	2.1	97.9	100.0

<sup>1</sup> Preliminary. <sup>2</sup> Revised.

general operating loans and weakest for feeder cattle loans (table 3). The strong demand for operating loans was probably due to lower farm product prices and higher input prices. Decreased demand for feeder cattle loans probably reflected the uncertainty about future fed cattle prices. However, some increase in feeder cattle loans and a considerable increase in general operating loans were expected by lenders in 1978.

More loans than usual were being renewed or extended. There was some increase in problem loans and lenders reported that they were improving their abilities to consult and work more closely with their borrowers. But generally, the lenders indicated that the condition of their farm borrowers was satisfactory, indicating that most of those who were experiencing cash flow problems

Table 3—Changes in volume of different types of farm loans at commercial banks, United States<sup>1</sup>

Type of loan	Estimated change:			Expected change:		
	Mid-1976 to mid-1977			Mid-1977 to mid-1978		
	Increase	Decrease	Same	Increase	Decrease	Same
<i>Percent of banks reporting</i>						
General operating ..	80	5	15	74	6	20
Machinery .....	57	16	27	40	27	33
Farm real estate ..	40	12	48	32	19	49
Crop storage .....	39	9	52	46	10	44
Livestock .....	32	20	48	47	8	45
Feeder cattle ....	19	30	51	37	12	15
Total farm loans ..	78	6	16	74	6	20

<sup>1</sup> Data were obtained in a survey conducted by the American Bankers Association (ABA).

## FARM DEBT OUTSTANDING \*

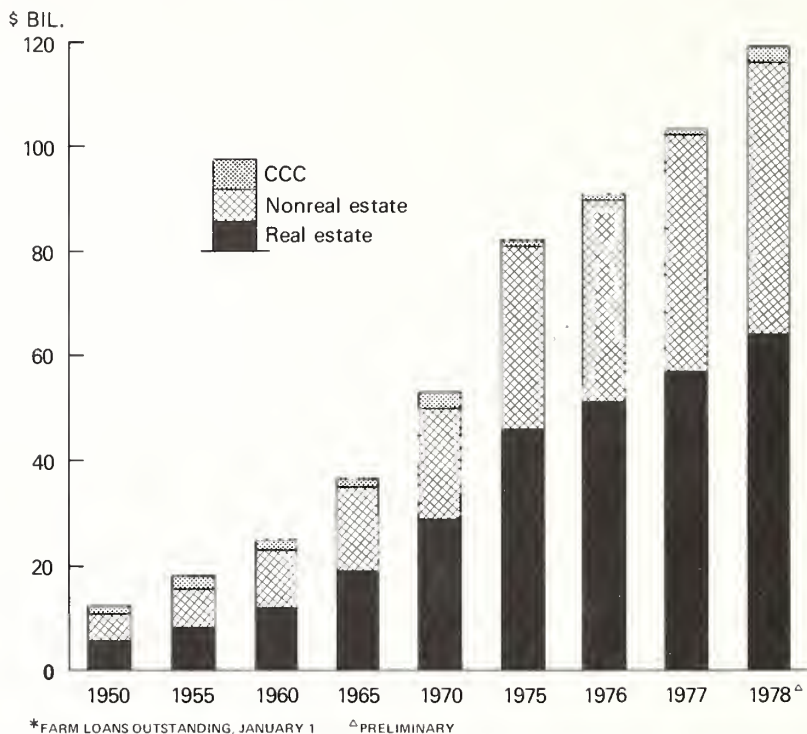


Figure 2

were being assisted in restructuring their debts, or otherwise appeared to have satisfactorily resolved their situation thus far.

### Farm Real Estate Debt

Farm real estate debt is expected to reach \$64.5 billion by January 1, 1978, up 14 percent for the year, compared with about an 11 percent increase for the year before (table 4). This increase in debt outstanding resulted from a combination of the following: (1) a probable increase in the rate of transfers, (2) higher land prices, (3) slower repayment rates in some areas brought on by declining farm incomes, and (4) a much greater than normal proportion of short-term debt being converted into loans secured by farm real estate.

According to these estimates all lender groups, except Farmers Home Administration (FmHA), are expected to show a larger percentage increase in debt outstanding for the year ending January 1, 1978 than for the previous year. Life insurance companies are expected to show the largest percentage increase with 17.6 percent, closely followed by Federal land banks (FLB's) and commercial banks.

Life insurance companies are continuing their competitive expansion back into the farm real estate market that began two years ago. FLB's are continuing their dominant position in farm real estate lending with ample availability of loan money, and commercial banks are securing their short-term debt with farm real estate loans to an increasing extent. Forty-nine percent of the bankers surveyed reported an increase in the amount of short-term debt being converted into longer term farm mortgage secured loans.

Like farm income, credit availability is an important factor influencing the present level of land prices. Although the cost-price squeeze is impeding payment of short-term debt, long-term debt repayment has felt little pressure as of yet, except in the Plains and Western States.

FLB's and life insurance companies through midyear 1977 report little or no change in repayment, delinquency, and foreclosure rates. Most producers apparently continue to have relatively low debt-to-equity ratios and have been able to meet their debt obligations. The real estate debt-to-real estate asset ratio based upon January 1, 1978 estimates was 11.8 percent, up from 11.4 percent for 1977 but still lower than any other year's ratio since 1966. Interest rates on FLB and life

Table 4—Real estate farm debt outstanding, January 1, 1968-1978

Year	Federal land banks	Farmers home administration	Life insurance companies	Commercial banks	Individuals and others	Total
<i>Million Dollars</i>						
1968 .....	5,563	1,844	5,540	3,061	9,135	25,142
1969 .....	6,081	2,054	5,764	3,333	10,165	27,397
1970 .....	6,671	2,280	5,734	3,545	10,953	29,183
1971 .....	7,145	2,440	5,610	3,772	11,378	30,346
1972 .....	7,880	2,618	5,564	4,218	11,927	32,208
1973 .....	9,050	2,835	5,643	4,792	13,437	35,758
1974 .....	10,901	3,013	5,965	5,458	15,915	41,253
1975 .....	13,402	3,215	6,297	5,966	17,408	46,288
1976 .....	15,950	3,369	6,726	6,296	18,728	51,069
1977 .....	18,455	3,688	7,400	6,781	20,266	56,590
1978 <sup>1</sup> .....	21,630	3,970	8,700	7,900	22,290	64,490
<i>Dollar Change</i>						
1968-73 .....	3,487	991	103	1,731	4,302	10,616
1973-78 .....	12,580	1,135	3,057	3,108	8,853	28,732
1973-74 .....	1,851	178	322	666	2,478	5,495
1974-75 .....	2,501	202	332	508	1,493	5,035
1975-76 .....	2,548	154	429	330	1,320	4,781
1976-77 .....	2,505	319	674	485	1,538	5,521
1977-78 .....	3,175	282	1,300	1,119	2,024	7,900
<i>Percent Change</i>						
1968-73 .....	62.7	53.7	1.9	56.6	47.1	42.2
1973-78 .....	139.0	40.0	54.2	64.9	65.9	80.4
1973-74 .....	20.5	6.3	5.7	13.9	18.4	15.4
1974-75 .....	22.9	6.7	5.6	9.3	9.4	12.2
1975-76 .....	19.0	4.8	6.8	5.5	7.6	10.3
1976-77 .....	15.7	9.5	10.0	7.7	8.2	10.8
1977-78 .....	17.2	7.6	17.6	16.5	10.0	14.0
<i>Percentage Distribution of Debt</i>						
1968 .....	22.1	7.3	22.1	12.2	36.3	100.0
1973 .....	25.3	7.9	15.8	13.4	37.6	100.0
1974 .....	26.4	7.3	14.5	13.2	38.6	100.0
1975 .....	29.0	6.9	13.6	12.9	37.6	100.0
1976 .....	31.2	6.6	13.2	12.3	36.7	100.0
1977 .....	32.6	6.5	13.1	12.0	35.8	100.0
1978 .....	33.5	6.2	13.5	12.2	34.6	100.0

<sup>1</sup> Preliminary.

insurance company loans have decreased a little and a quarterly survey of life insurance companies shows little change in repayment ratios over the last 17 years.

#### Nonreal Estate Farm Debt

Nonreal estate farm loans for both the institutional and the merchant and dealers groups are reported to be rising strongly this year and are expected to increase strongly again next year. Based on lender forecasts, nonreal estate loans outstanding (excluding CCC loans) are expected to reach \$52 billion by the end of 1977, up \$6.7 billion from a year earlier. CCC price support loans are expected to reach \$2.5 billion by yearend (table 5).

While nonreal estate farm loans of commercial banks rose much more rapidly than usual in the

first half of 1977 they appear to have leveled off in the last half of the year. Survey data indicate that renewals and extensions of loans were much more common in 1977 than in 1976, and resulted in a larger part of the total loans outstanding being carried over from earlier periods. Also, there was a considerable increase at banks in the frequency of conversions of short-term loans into longer term loans secured by farmland. Such conversions of short-term loans tended to boost the real estate secured loans totals and to limit the rise in the nonreal estate loans.

There were some indications early in 1977 that banks in the Plains States were short of loan funds. Many of these banks remain in a tight position and a similar situation is now being experienced in some parts of the Corn Belt. About 40 per-

Table 5—Nonreal estate farm debt outstanding, January 1, 1968-1978

Year	Debt owed to reporting institutions (excluding CCC)					Debts owed to individuals and others	Total excluding CCC loans	Price support and storage loans made or guaranteed by CCC	Total including CCC loans
	All operating banks	Production credit associations	Federal intermediate credit banks	Farmers home administration	Total				
	Million dollars								
1968 .....	9,272	3,518	176	798	13,764	7,070	20,834	1,420	22,254
1969 .....	9,720	3,826	180	822	14,547	5,840	20,387	2,671	23,058
1970 .....	10,330	4,495	218	785	15,828	5,340	21,168	2,676	23,844
1971 .....	11,102	5,295	220	795	17,412	4,850	22,262	1,876	24,138
1972 .....	12,498	6,078	237	771	19,584	5,060	24,644	2,262	26,906
1973 .....	14,315	6,607	251	781	21,954	5,840	27,794	1,793	29,587
1974 .....	17,167	7,829	331	877	26,204	5,930	32,134	750	32,884
1975 .....	18,238	9,519	374	1,044	29,176	6,050	35,226	319	35,545
1976 .....	20,160	10,773	350	1,772	33,056	6,350	39,406	358	39,764
1977 .....	23,283	12,233	368	1,877	37,761	7,300	45,061	1,012	46,073
1978 <sup>1</sup> .....	25,800	14,300	430	2,950	43,480	8,250	51,730	2,492	54,222
	Dollar Change								
1968-73 .....	5,043	3,089	75	-17	8,190	-1,230	6,960	373	7,333
1973-78 .....	11,485	7,693	179	2,169	21,526	2,410	23,936	699	24,635
1973-74 .....	2,852	1,222	80	96	4,250	90	4,340	-1,043	3,297
1974-75 .....	1,071	1,690	43	167	2,972	120	3,092	-431	2,661
1975-76 .....	1,922	1,254	-24	728	3,880	300	4,180	39	4,219
1976-77 .....	3,123	1,460	18	105	4,705	950	5,655	654	6,309
1977-78 .....	2,517	2,067	62	1,073	5,719	950	6,669	1,480	8,149
	Percent Change								
1968-73 .....	58.4	87.8	42.6	-2.1	59.5	-17.4	33.4	26.3	33.0
1973-78 .....	80.2	116.4	71.3	277.7	98.1	41.3	86.1	39.0	83.3
1973-74 .....	19.9	18.5	31.9	12.3	19.4	1.5	15.6	-58.2	11.1
1974-75 .....	6.2	21.6	13.0	19.0	11.3	2.0	9.6	-57.5	8.1
1975-76 .....	10.5	13.2	-6.4	69.7	13.3	5.0	11.9	12.2	11.9
1976-77 .....	15.5	13.6	5.1	5.9	14.2	15.0	14.4	182.7	15.9
1977-78 .....	10.8	16.9	16.8	57.2	15.1	13.0	14.8	146.2	17.7
	Percentage Distribution of Debt								
1968 .....	41.7	15.8	0.8	3.5	61.8	31.8		6.4	100.0
1973 .....	48.4	22.3	0.9	2.6	74.2	19.7		6.1	100.0
1974 .....	52.2	23.8	1.0	2.7	79.7	18.0		2.3	100.0
1975 .....	51.3	26.8	1.1	2.9	82.1	17.0		0.9	100.0
1976 .....	50.7	27.1	0.9	4.4	83.1	16.0		0.9	100.0
1977 .....	50.5	26.6	0.8	4.1	82.0	15.8		2.2	100.0
1978 .....	47.6	26.4	0.8	5.4	80.2	15.2		4.6	100.0

<sup>1</sup> Preliminary. <sup>2</sup> Revised.

cent of the banks in the recent survey indicated that their current loan to deposit ratio was higher than desired. This is a larger than normal proportion and indicates some tightening of bank credit.

PCA loans are forecast to have increased more rapidly in 1977 than in the previous year. Loan repayment rates were reported as lower in 1977 than 1976 in most of the Farm Credit Districts, and renewals to have been higher. Although both the PCA's and the commercial banks indicated more than the usual number of their borrowers were experiencing loan repayment difficulties, both of these lender groups expected they would continue to finance the great bulk of their present borrowers next year. About 5 percent of their borrow-

ers were not expected to be able to qualify for financing next year, mainly because of inadequate incomes, or low equities in their farm assets.

There has been a large increase in FmHA emergency lending this year. By January 1, 1978 emergency loans are expected to reach \$1.5 billion, a half-billion dollars greater than a year earlier. The survey also reports that the FmHA lending authority had been used at times to restructure and lengthen the loan repayment pattern as well as to assist borrowers in overcoming the effects of drought or other weather emergencies. Demand for FmHA loans was reported to be strong in almost all parts of the nation.

This year a large jump occurred in the volume of



loan funds supplied by farm machinery dealers to finance the sales of their farm machinery and equipment. The volume of outstanding loans is expected to rise by 26 percent or about a half-billion dollars over the revised estimate for December 31, 1976 (table 6). In fact, the estimate for the end of 1976 was revised up from the preliminary estimate by nearly \$400 million—from \$1,799 million to \$2,192 million. Thus, it appears that farm machinery sellers are again becoming major loan fund suppliers. It is not known whether this increase in loan activity is occurring with other input suppliers.

**Interest rates.** Interest rates on real estate and nonreal estate farm loans have shown slight declines so far this year (figure 3). Rates charged by FLB's are now a little below the 1975-76 level. Changes in rates of other major real estate lenders (not in the figure) have shown similar movements. Rates of life insurance companies are higher than those of the FLB's, and rates on seller financed real estate loans are lower.

PCA's loan rates are now about 1¾ percentage points below the high of early 1975. At present, rates charged by commercial banks (not in the figure) are somewhat higher than PCA rates. In periods of strong demands for funds in the central money markets, PCA rates exceed those of rural

Table 6—Loan funds supplied by six large full-line farm machinery manufacturers for retail purchases of farm machinery and equipment<sup>1</sup>

	Loans outstanding end of year	
	Million dollars	Percent (1970=100)
1970 .....	1,170	100
1971 .....	1,179	101
1972 .....	1,499	128
1973 .....	1,183	101
1974 .....	1,160	99
1975 .....	1,530	131
1976 <sup>2</sup> .....	2,192	187
1977 <sup>3</sup> .....	2,757	236
	Loans made during year	
	Million dollars	Percent (1970=100)
1970 .....	928	100
1971 .....	936	101
1972 .....	1,329	143
1973 .....	1,065	115
1974 .....	876	94
1975 <sup>2</sup> .....	1,236	133
1976 <sup>2</sup> .....	1,915	206
1977 <sup>3</sup> .....	2,191	236

<sup>1</sup> Excludes loans estimated to have been made for nonfarm purposes. Years shown are company fiscal years: October 31 for 4 companies, December 31 for the other 2. Data, including estimates for 1977 and revisions, were provided by the six companies. <sup>2</sup> Revised. <sup>3</sup> Estimated.

## INTEREST RATES ON FARM LOANS

PERCENT

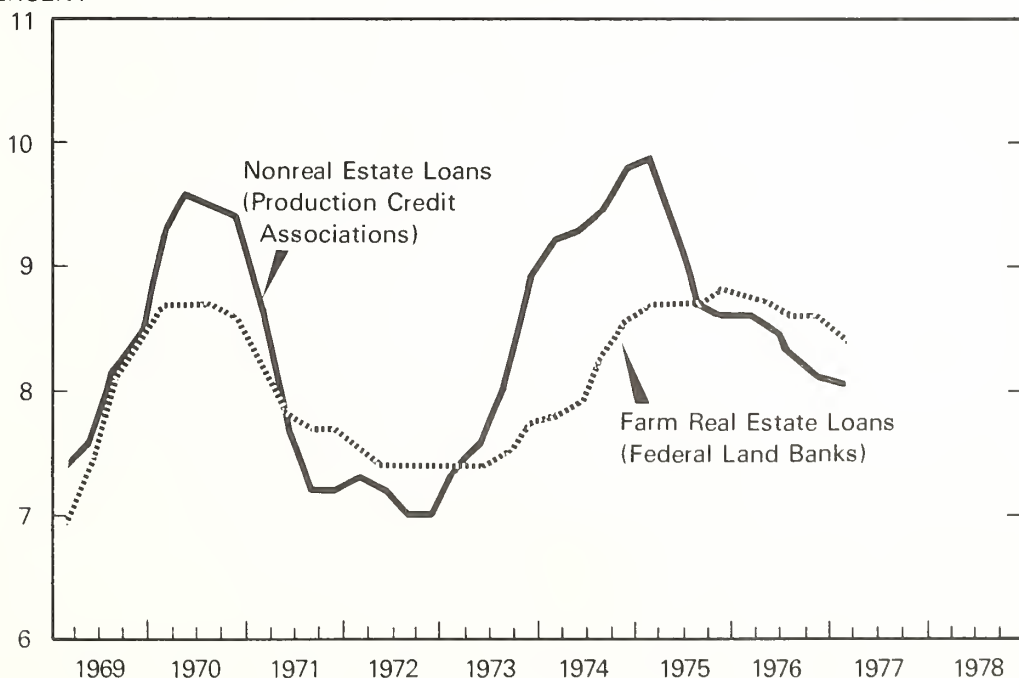


Figure 3

banks. Rates charged by merchant and dealers typically are higher than those of banks or PCA's.

Rates on nonreal estate and real estate farm loans are expected to rise a little in 1978.

## CASH SOURCES AND USES OF FUNDS IN THE FARM SECTOR-1977

Cash sources of funds for the farm sector in 1977 are forecast at \$79.7 billion (table 7). These funds include net cash farm income plus nonfarm income of farm operators and their families as well

as the net flow of real estate and nonreal estate loan funds. Income from the sale of farmland to the nonfarm sector, gifts, and inheritances are not included due to the lack of data.

Table 7—Cash sources and uses of funds for the U.S. Farm Sector, 1968-1977

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977 <sup>a</sup>
	Billion dollars									
Cash Sources of Funds: <sup>b</sup>										
1 Net cash income from farm and nonfarm sources .....	33.1	36.5	37.5	38.7	46.8	64.9	64.9	64.6	64.9	65.2
2 Net flow of real estate loans .....	2.3	1.8	1.1	1.9	3.5	5.6	5.0	4.8	5.7	7.9
3 Net flow of nonreal estate loans <sup>c</sup> .....	-0.5	.7	1.1	2.4	3.2	4.3	3.1	4.2	5.3	6.6
4 Total cash sources of funds <sup>d</sup> .....	34.9	39.0	39.7	43.0	53.5	74.8	73.0	73.6	75.9	79.7
Cash Uses of Funds: <sup>d</sup>										
5 Purchases of machinery and motor vehicles ...	4.6	4.5	4.9	4.9	5.7	7.6	8.2	8.8	9.6	10.1
6 Capital improvement to real estate assets .....	2.1	2.3	2.4	2.5	2.4	3.1	4.4	4.3	5.0	5.1
7 Other capital purchases <sup>e</sup> .....	1.6	1.2	1.5	2.5	3.1	2.4	1.0	1.2	1.2	1.4
8 Annual capital formation .....	8.3	8.0	8.8	9.9	11.2	13.1	13.6	14.3	15.8	16.6
9 Purchases of real estate from discontinuing proprietors .....	4.3	4.3	4.1	5.8	8.5	11.4	9.5	9.8	11.2	12.6
10 Total purchased capital .....	12.6	12.3	12.9	15.7	19.7	24.5	23.1	24.1	27.0	29.2
11 Personal consumption and other cash uses .....	22.3	26.7	26.8	27.3	33.8	50.3	49.9	49.5	48.9	50.5
12 Total cash uses of funds .....	34.9	39.0	39.7	43.0	53.5	74.8	73.0	73.6	75.9	79.7
Capital Flows:										
13 Total purchased capital .....	12.6	12.3	12.9	15.7	19.7	24.5	23.1	24.1	27.0	29.2
14 Change in inventories .....	.1	.1	.0	1.4	.9	3.4	-1.6	3.4	-1.9	-.2
15 Total capital flow .....	12.7	12.4	12.9	17.1	20.6	27.9	21.5	27.5	25.1	29.0
Real Dollar Flows:										
16 Total net cash income/GNP deflator (1958=100) .....	27.0	28.5	27.8	27.3	32.1	41.5	38.1	34.9	33.2	31.4
17 Personal consumption and other cash uses/ GNP deflator (1958=100) .....	18.2	20.8	19.8	19.3	23.2	32.2	29.3	26.7	25.1	24.4
	Percent									
Analytical Ratios:										
18 Total purchased capital/total net cash income (line 10÷1) .....	38	34	34	41	42	38	36	37	42	45
19 Total net flow of loans/total purchased capital (2+3÷10) .....	14	20	17	27	34	40	35	37	41	50
20 Total net flow of loans/total capital flow (2+3÷15) .....	14	20	17	25	33	35	38	33	44	50
21 Net flow of real estate loans/total cash uses (2÷12) .....	7	5	3	4	7	7	7	7	7	10
22 Net flow of nonreal estate loans/total cash uses (3÷12) .....	-1	2	3	6	6	6	4	6	7	8
23 Cash income/total cash uses (1÷12) .....	94	93	94	90	87	87	89	87	86	82
24 Debt outstanding/total net cash income .....	143	138	141	141	126	101	114	127	140	157

<sup>a</sup>Preliminary. <sup>b</sup>Cash sources of funds from sale of real estate to the nonfarm sector are not included due to the lack of data. <sup>c</sup>Does not include CCC loans. <sup>d</sup>Gross cash farm operating expenses have been deducted from gross cash farm income. <sup>e</sup>Includes net additions to household furnishings, commercial bank deposits and currency, and purchases of breeding livestock. Purchases of breeding livestock are estimated as a percentage of total expenditures for the purchase of livestock. Census data are used to estimate the percentage values.



## Income from Farm and Nonfarm Sources

Net cash income from farm and nonfarm sources (in current dollars) has remained virtually unchanged since 1973. While substantial decreases in net cash farm income have occurred in recent years, these decreases have been offset by increases in nonfarm income. Measured in real dollars (using the GNP price deflator) total net cash income of farm operators has fallen every year since 1973. Despite the substantial decline, real net cash income in 1977 remains well above the amount of such income in the late 1960's.

The ratio of net cash income from farm and nonfarm sources to total cash uses of funds measures the degree to which the farm operators rely on internally generated funds to meet their cash needs. For 1977, the ratio is estimated at 82 percent, a sharp drop from the previous years. This sharp drop is due to the poor cash flow position of many operators brought on by the slump in farm commodity prices. While farm commodity prices fell, cash uses of funds did not. As a result, farm operators financed a larger than usual proportion of their cash needs with borrowed funds.

## Farm Borrowing

The net increase in farm real estate loans for 1977 is estimated at \$7.9 billion, or \$2.4 billion more than the net increase in 1976. The major institutional suppliers of farm real estate loans have all shared in this huge increase. The net flow of nonreal estate loans, excluding CCC non recourse loans, is estimated at \$6.7 billion in 1977. This increase will be a record amount and shows the greater reliance by farm operators on external funds to finance operating expenses and to purchase capital items. Again, a slower rate of repayment on loans has contributed to the increase.

CCC loan activity also has increased sharply in 1977. As a result of low commodity prices, farm operators placed more crops under nonrecourse CCC loans. The nonrecourse loans allow farmers to obtain the higher of market price or the loan rate.

The ratio of debt outstanding to total net cash income is a measure of the relative burden of debt against income. The relative burden of debt has increased substantially since 1973. For 1977, total debt was 1.57 times as great as net cash income. Movements toward higher relative debt burden indicate less liquid position for farm operators and portend repayment difficulties.

## Cash Uses of Funds in the Farm Sector

A cash flow statement requires that cash sources of funds equal cash uses of funds. Thus, total cash uses of funds of \$79.7 billion is identical

to cash sources of funds. Cash funds can be used for the purchase of capital or for personal consumption and other cash uses.

## Farm Capital Flows

Total purchases of farm capital for 1977 are estimated at \$29.7 billion, a 10 percent increase over 1976. Most of the increase, however, reflects the higher prices paid for capital items. For example, purchases of machinery and motor vehicles are estimated at \$10.1 billion, an increase of about 5 percent over 1976. But since machinery prices increased by more than 5 percent, the value of machinery purchases in constant prices is down in 1977 from 1976. Capital improvements to real estate assets consist of expenditures on operator dwellings, other buildings, and land improvements.

Expenditures for these items in 1977 are estimated at \$5.1 billion, slightly higher than in 1976. Expenditures for farm storage structures is one item in this category which has increased substantially in some regions. Other capital purchases include net changes in bank deposits and currency; net additions to household furnishings and equipment; and purchases of breeding livestock. An estimated \$1.4 billion is being spent for these purposes in 1977.

Purchases of real estate from discontinuing proprietors in 1977 are estimated at \$12.6 billion, an increase of more than 12 percent over 1976. Most of this increase is due to higher land values and a small part to an estimated increase in the rate of farm transfers.

Changes in crop and livestock inventories are a relatively small but highly variable component of capital flows. Unlike other capital assets, most inventories are home grown and not purchased. Ratios of the net flow of loan funds to purchased capital, or to total capital flows, allow one to measure the relative importance of borrowed funds in financing capital acquisitions. For 1977, the total net flow of loans were equal to 50 percent of total capital flow. This represents a record high, well above any previous year.

## Personal Consumption and Other Cash Uses

Personal consumption and other cash uses of funds include expenditures for food, clothing, State and Federal income taxes, nonfarm investments, and other personal consumption items. The value is estimated residually by subtracting total purchased capital from total cash sources of funds. For 1977, personal consumption and other cash uses are estimated at \$50.5 billion. Personal consumption and other cash uses in recent years have accounted for about two thirds of the total cash

uses of funds while purchases of capital have accounted for the remaining one third. This relationship has been relatively stable since 1967.

Personal consumption and other cash uses are discussed in nominal dollar amounts. Estimates in

real dollar values are obtained by dividing nominal values by the GNP price deflator. In real values, personal consumption and cash uses in 1977 are down slightly from 1976, and about 25 percent below the high in 1973.

## OUTLOOK FOR 1978

The financial outlook for the farm sector in 1978 is less favorable than for the past five years. Huge stocks of corn and wheat going into the year may result in prices at or near Government support levels through much of 1978. Abundant supplies of grain, at relatively low prices, probably will favor expansion of livestock production. More livestock production will dampen price gains on livestock products. Government support to bolster farm income will be greater in 1978 than any time since 1972.

Crop output in 1977 was high in most sections of the country. Combined with carryovers in the preceeding two years, huge stocks of major grains, especially wheat, have accumulated. Production in 1978 will be reduced by the set-aside provisions of government programs primarily wheat, but the total crop production will probably be reduced only slightly. The biggest uncertainty in crop production, as always, is weather. In the projections made here, average weather conditions are assumed. Crop prices in 1978 are expected to be lower than they averaged in 1977.

Production of livestock and livestock products in 1978 is expected to remain large due in part to relatively low grain prices. Hog production in particular is expected to show a substantial increase. Projections of prices received varied for different types of livestock, but overall the index of prices received for livestock and livestock products is projected to increase in 1978.

Using current projections of indexes of prices received and paid and of crop and livestock output, quantitative projections of the financial outlook for the farm sector are presented in the following sections. It should be recognized that these projections could change substantially under alternative price and output conditions. The farm income estimate was made prior to recent world grain crop and trade developments.

### Forecasting Procedures

The balance sheet for January 1, 1979, and cash flow projections for 1978 are developed with the aid of an econometric model of the farm financial sec-

tor—the Aggregate Income and Wealth Simulator.<sup>1</sup> The model uses functional equations which have been empirically estimated and tested. It should be recognized that projections made from such models are based upon the premise that past relationships among variables are a good approximation of what will happen in the future. Preliminary January 1, 1978 balance sheet values are used as the starting point from which more distant projections are made.

### The Projected Balance Sheet, January 1, 1979

The projected value of farm assets as of January 1, 1979 is \$782 billion (table 8). This would be an increase of 7 percent for 1978. As in other recent years, most of the increase in value is attributable to unrealized capital gains since the assets value in 1967 prices is projected to remain virtually unchanged.

Financial assets are expected to grow by roughly 4 percent during 1978. But in terms of the real purchasing power, a decline is expected. This decline can be attributed to estimated reductions in real income of farm operators during 1978.

Nonreal estate assets include farm machinery and motor vehicles, crop and livestock inventories, and household furnishings and equipment. The total value of nonreal estate assets are forecast to be 13 percent higher at the end of 1978 than at the end of 1977. Much of the increase reflects valuation changes, although physical stocks of crops and livestock are also projected to increase.

Real estate values are projected to increase by 6 percent during 1978. This would be substantially less than the 10 percent increase now expected for 1977. The rate of increase is expected to about match the increase in prices in the general economy. In recent years, land values have increased

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<sup>1</sup>The Aggregate Income and Wealth (AIW) Simulator for the farm sector has been developed and maintained by ERS economists. The interest reader can write to David Lins, 305 Mumford Hall, Urbana, Illinois 61801 for a working paper which documents the current structure of the model and provides the empirical properties of equations contained in the model.

Table 8—Balance sheet for the farm sector, January 1, 1978 and forecast to January 1, 1979

Item	Current values		Values in 1967 prices		1978 to 1979 with—	
	January 1, 1978 <sup>a</sup>	January 1, 1979 <sup>b</sup>	January 1, 1978 <sup>a</sup>	January 1, 1979 <sup>b</sup>	Current values <sup>a</sup>	Value in 1967 prices <sup>b</sup>
	<i>Billion dollars</i>				<i>Percent change</i>	
Physical assets:						
Real estate assets .....	546.9	579.4	198.5	198.7	5.9	0.1
Nonreal estate assets <sup>c</sup> .....	148.0	167.0	74.1	75.7	12.8	2.2
Total physical assets .....	694.9	764.4	272.6	274.4	7.4	0.7
Financial assets:						
Commercial bank deposits and currency .....	16.4	17.0	7.9	7.8	3.7	-1.3
Other financial assets <sup>d</sup> .....	18.3	19.0	9.0	8.7	3.8	-3.3
Total financial assets .....	34.7	36.0	16.9	16.5	3.7	-2.4
Total farm assets .....	729.6	782.4	289.5	290.9	7.2	0.5
Debt claims:						
Real estate debt .....	64.5	72.9			13.0	
Nonreal estate debt including CCC loans .....	54.2	60.1			10.9	
Total debt .....	118.7	133.0			12.0	
Equity .....	610.9	649.4			6.3	
	<i>Percent</i>					
Debt to asset ratio .....	16.3	17.0			4.3	
Debt to equity ratio .....	19.4	20.4			5.2	

<sup>a</sup>Preliminary estimate. <sup>b</sup>Forecast by the AIW simulator. <sup>c</sup>Includes machinery and motor vehicles, household furnishings and equipment and inventories of crops (including crops held as security for CCC loans) and livestock. <sup>d</sup>Includes U.S. savings bonds and investments in farmer cooperatives. Does not include financial claims on specific nonfarm assets such as holding of common stock as data on these claims are not available.

much more rapidly than prices in the general economy. The projected increase in real estate values reflects buyer's expectations that capital gains will remain strong.

Farm debt is projected to increase by about 12 percent during 1978. Real estate debt is expected to grow by more than nonreal estate debt because of a projected increase in the value of land transferred and because some farm operators will again be refinancing short-term loans with real estate debt. Demand for nonreal estate loans should also remain strong because of the expected increase in costs of purchased inputs combined with relatively low prices received for farm commodities.

An increase of \$38.5 billion in the equity of farm proprietors is forecast for 1978. If one deflates the January 1, 1979 value to measure real purchasing power, then proprietor's equities in real terms are expected to be about the same at the start of 1979 as at the start of 1978.

#### Projected Cash Sources and Uses and Funds for 1978

Final estimates of 1977 farm income and expenses and off-farm income are not yet available. The income and expenditure forecasts for 1977 represent current ERS estimates when avail-

able and model estimates when preliminary estimates were not available. These values are compared in table 9 to projection estimates for 1978 developed with the aid of the AIW simulator.

Total cash sources of funds for 1978 are projected at \$79.7 billion, virtually unchanged from the preliminary estimate for 1977. Some increase in off-farm income is expected, while net cash farm income is projected to decline slightly. Net increases in debt are expected to account for 18 percent of the net cash flow—the same as in 1977. One measure of the relative burden of debt is given by the ratio of debt outstanding to total net cash income. This ratio has increased tremendously in recent years reflecting the fact that increases in debt have far outpaced increases in income.

Annual capital formation for 1978 is forecast at \$17.6 billion, a small increase over 1977. If one deflates the capital expenditures by the prices paid index, then real capital expenditures are expected to decline during 1978. Purchases of real estate assets from discontinuing proprietors is forecast to total \$14.1 billion during 1978. This represents an increase of 11 percent over preliminary estimates for 1977, and reflects, in part, the projection of an increase in the rate of real estate transfers.

Personal consumption and other cash uses of funds are forecast to total \$48.2 billion during 1978.



Table 9—Cash sources and uses of funds for the U.S. farm sector, 1977 and projection for 1978

Item	1977 <sup>a</sup>	1978 <sup>b</sup>
	<i>Billion dollars</i>	
Cash sources of funds from: <sup>c</sup>		
1 Cash income from farm and nonfarm sources <sup>c</sup> . . . . .	61.2	65.6
2 Net flow of real estate loan funds . . . . .	7.9	8.4
3 Net flow of nonreal estate loan funds <sup>d</sup> . . . . .	6.6	5.9
4 Total cash sources of funds <sup>e</sup> . . . . .	79.7	79.9
Cash uses of funds: <sup>e</sup>		
5 Purchase of machinery and motor vehicles . . . . .	10.1	10.8
6 Capital improvements to real estate assets . . . . .	5.1	5.2
7 Other capital purchases <sup>f</sup> . . . . .	1.4	1.6
8 Annual capital formation . . . . .	16.6	17.6
9 Purchases of real estate asset from discontinuing proprietors . . . . .	12.6	14.1
10 Total purchased capital . . . . .	29.2	31.7
11 Personal consumption and other cash uses of funds . . . . .	50.5	48.2
12 Total cash uses of funds <sup>e</sup> . . . . .	79.7	79.9
Capital flows:		
13 Total purchased capital . . . . .	29.2	31.7
14 Change in inventories . . . . .	-2	1.4
15 Total capital flow . . . . .	29.0	33.1
Real dollar flows:		
16 Total net cash income/GNP deflator (1958=100) . . . . .	31.4	30.0
17 Personal consumption and other cash uses/GNP deflator (1958=100) . . . . .	24.4	22.1
	<i>Percent</i>	
Analytical ratios:		
18 Total purchased capital/total net cash income (10 ÷ 1) . . . . .	45	48
19 Total net flow of loans/total purchased capital (2 + 3 ÷ 10) . . . . .	50	43
20 Total net flow of loans/total capital flow (2 + 3 ÷ 15) . . . . .	50	43
21 Net flow of real estate loans/total cash uses (2 ÷ 12) . . . . .	10	11
22 Net flow of nonreal estate loans/total cash uses (3 ÷ 12) . . . . .	8	7
23 Cash income/total cash uses (1 ÷ 12) . . . . .	82	82
24 Debt outstanding/total net cash income . . . . .	157	181

<sup>a</sup>Preliminary estimate. <sup>b</sup>Forecast by the AIW simulator.

<sup>c</sup>Cash sources of funds from sale of real estate to the nonfarm sector are not included. <sup>d</sup>Does not include CCC loans. <sup>e</sup>Gross cash farm operating expenses have been deducted from gross cash farm income. <sup>f</sup>Includes net additions to household furnishings, commercial bank deposits and currency, and purchases of breeding livestock. Purchases of breeding livestock are estimated as a percentage of total expenditures for the purchase of livestock. Census benchmark data are used to estimate the percentage values.

Both in nominal and real terms this reflects a drop from 1977. The implications of this and other projection estimates follow.

#### Implications of Projection Estimates For Farm Lenders

Projection estimates for 1978 indicate more difficult times for lenders in making and servicing their farm loans. Repayment ability of increased numbers of farm borrowers will be reduced because of low farm income.

Difficulties will most often arise with young operators as well as longer established farmers who have recently undertaken substantial expansion or who are highly leveraged and have few financial reserves. Delinquencies among such borrowers are expected to rise. While more established farm borrowers have gained considerable equity in land, they may still have cash flow problems in meeting on-going cash expenses plus principal and interest payments on debt. In these cases, lenders may be asked to restructure debt, much as they have been doing during 1977. That is, farm operators may mortgage land to obtain funds to meet payment schedules on short and intermediate term loans, or to finance operating expenses.

Commercial banks may experience more problems next year than other lenders in meeting loan demands of farm operators. Going into 1978, loan to deposit ratios for many rural banks, particular in cash grain areas, were at an alltime high. Further increases in the loan to deposit ratio for these banks may not be feasible. Hence, expansion of loan volume may be curtailed since deposits in rural banks are not likely to keep pace with loan demand in a period of reduced farm income. Also, such banks may seek other sources of loans funds. Well established operators will continue to be served, but more marginal operators or new borrowers may have difficulty in obtaining bank loans.

Because PCA's acquire loan funds through the national money markets, no problems in acquiring funds for agriculture are anticipated. But like other lenders, repayment difficulties of their borrowers will probably be more pronounced than in previous years. More borrowers will attempt to hold inventories in hopes of higher prices. Providing the financing for the holding of such inventories will require careful analysis of price forecasts and marketing strategies.

FLB's and life insurance companies will continue to experience a high demand for real estate

loans. While obtaining the funds necessary for such loans should not be a problem, the income generating capacity of the borrowers may be cause for concern.

The FmHA will likely experience a greater volume of loan requests in 1978. Because of low income and poor repayment ability, more farm operators will be unable to obtain financing from private lending sources. These borrowers will seek financing through the FmHA.

In 1978, all lenders will be working much harder in making new loans in the first place and in counselling with those borrowers who get into difficulties. Cash flow planning may be more important than ever. Farmers are likely to ask for more help on evaluating investments and in devising marketing strategies.

One of the uncertainties in 1978 for farm lenders will be the dollar volume of crops placed under CCC loan. Loan funds provided through CCC could reduce the demand for operating loans from other sources such as banks, and PCA's. Market prices relative to loan rates are of course an important determinant of the demand for CCC loans. If market prices are above loan rates, the demand for CCC loans may be small. If market prices are about equal to or below loan rates, loan volume could be high. Current expectations are that market prices may about equal loan rates. Consequently, the volume of CCC loans is expected to be high in months ahead. This will tend to moderate an already high demand for nonreal estate loans from banks and PCA's.

#### For Farm Borrowers

The model forecasts a reduction in net farm income in 1978 from 1977. In real dollar terms, the expected income decline from the previous four years suggests that purchases of personal consumption items will be cut. The importance of non-farm income is becoming more pronounced and these sources of income will likely be maintained or expanded in 1978.

The projected reduction in farm income means that a higher than normal number of farm operators must become more concerned with repaying old debts and at the same time financing new acquisitions and operating expenses. Repayment difficulties seem likely, especially for those operators who are highly leveraged and produce commodities hardest hit by price reductions. In some cases these operators may need to search for new lending sources.

For more established farm operators, who have considerable equity in real estate, loan repayment difficulties may still arise. High equity in real estate is no guarantee of sufficient cash flows necessary to meet consumption needs and repay debt.

Farm operators in this category will likely continue to be financed by their regular lending source. However, the lender may demand more security and may more closely scrutinize the income generating potential of new investments. In cases where loan repayment difficulties are severe, lenders may suggest a restructuring toward more long term debt.

In considering capital expansions, farm operators likely will carefully evaluate the income potential of such investments. Grain storage facilities may be one of the more favorable investment alternatives available. In some cases, machine sheds, barns, garages, and other structures may be converted to temporary storage use. But investments in new tractors and other farm implements may be postponed by a sizable number of operators. Farm machinery purchases have been large in recent years and many farmers are well equipped at present.

Purchases of farm real estate to expand farming operations are becoming more and more difficult for many farm operators. In many cases the price of land cannot be justified solely by the income generating potential of the land. Rather, expected capital gains on land have become a more important part of the price offered for the land. But capital gains on land do not yield cash necessary to meet loan commitments although at times refinancing provides addition funds as land prices rise. The purchase of land can be most easily handled by individuals or institutions with large financial reserves or with substantial income from nonfarm sources. Young farm operators seldom meet these criteria. Outside equity capital sources, such as mutual funds or foreign investors, often do meet these criteria. These investors are seeking investments with strong capital gains potential, and the rate of inflation of farm land in recent years has far exceeded the rate of inflation in the general economy. As long as this continues, interest in farmland by outside equity capital sources will remain strong.

#### For Farm Inputs Suppliers

The implications for input suppliers of farm finance projection estimates vary substantially from one supplier to another. Farm demand for major capital items will likely be reduced because of expected low farm income. Machinery manufacturers and dealers may find it necessary to offer delayed payment and easier credit terms to promote the sales of their products; this has been happening in 1977. Suppliers of production inputs such as seed, chemicals, and fuels may experience small reductions in demand for their products as a result of government set-aside programs. More importantly, there may be an increasing tendency

for farm operators to delay payments on open accounts.

Input suppliers, particularly those furnishing operating items, will be faced with increasing concerns over accounts receivable. Increases in open accounts may appear to be an attractive alternative for farm operators who face a liquidity problem and cannot obtain adequate financing from the traditional lending sources.

Contrary to most input suppliers, grain storage facility manufacturers and suppliers may experience continued strong demand for their products in 1978. Many farm operators want to hold grains in hopes for better prices and to earn storage payments if they place grain in the reserve program. In addition, government loan programs for the construction of grain storage facilities should provide further impetus to an already strong demand.

## TYPE OF FARM

The following section describes the prospective and current financial conditions of major farm types for the United States. An indication of the numbers and location of these units is shown in table 10, and on the maps accompanying the farm types. The numbers of farms, value of farm products produced, and value of land and buildings are from the 1974 Census of Agriculture.

Financial information in this report was received from commercial banks, Farmers Home Administration, Federal intermediate credit banks, Federal land banks, and major life insurance companies making farm loans. This information was used in analyzing the financial condition for 1977 and the outlook for 1978 for the major type of farms. In the statistical tables on financial condi-

tions presented in some of the farm type reports, only the data from commercial banks were included since the number of reports from banks was much larger than from the other lenders.

The general financial condition of several different types of farms as reported by bankers is summarized in table 11 and will be discussed further along with other information in each individual type of farm report. In general, bankers expect a slightly less favorable position in 1978 as compared with 1977 for the all farm type category. Financial conditions for cash grain farmers in 1978 are expected to continue to be less favorable than for most other farm types. A more favorable financial outlook is expected for dairy and cow calf farmers in 1978 as compared to 1977.

Table 10—Numbers and other characteristics of farm types, U.S. 1974 Census of Agriculture

Type of farms <sup>a</sup>	Number of farms	% distribution	Value of farm products produced		Value of land and buildings December 31, 1974	
			Million dollars	% distribution	Million dollars	% distribution
Cash grain <sup>b</sup> . . . . .	661.7	39.0	29.1	36.2	136.9	44.2
Livestock . . . . .	493.8	29.1	22.1	27.4	93.8	30.4
Dairy . . . . .	196.1	11.6	9.6	11.9	26.9	8.7
Tobacco . . . . .	95.5	5.6	1.7	2.0	6.2	2.0
Fruit and nut . . . . .	70.9	4.2	4.5	5.7	13.3	4.3
Poultry . . . . .	42.7	2.5	6.4	7.9	4.1	1.3
Cotton . . . . .	30.7	1.8	1.9	2.3	7.6	2.5
Vegetable . . . . .	19.5	1.2	2.1	2.7	4.6	1.5
Other <sup>c</sup> . . . . .	84.1	5.0	3.2	3.9	15.5	5.1
All types . . . . .	1,695.0	100.0	80.6	100.0	308.9	100.0

<sup>a</sup>Based on distribution of class 1-5 farms by types from the 1974 Census of Agriculture. The type of farm classification indicates a particular product or group of products amounts to 50 percent or more of the total value of all farm products sold during the year.

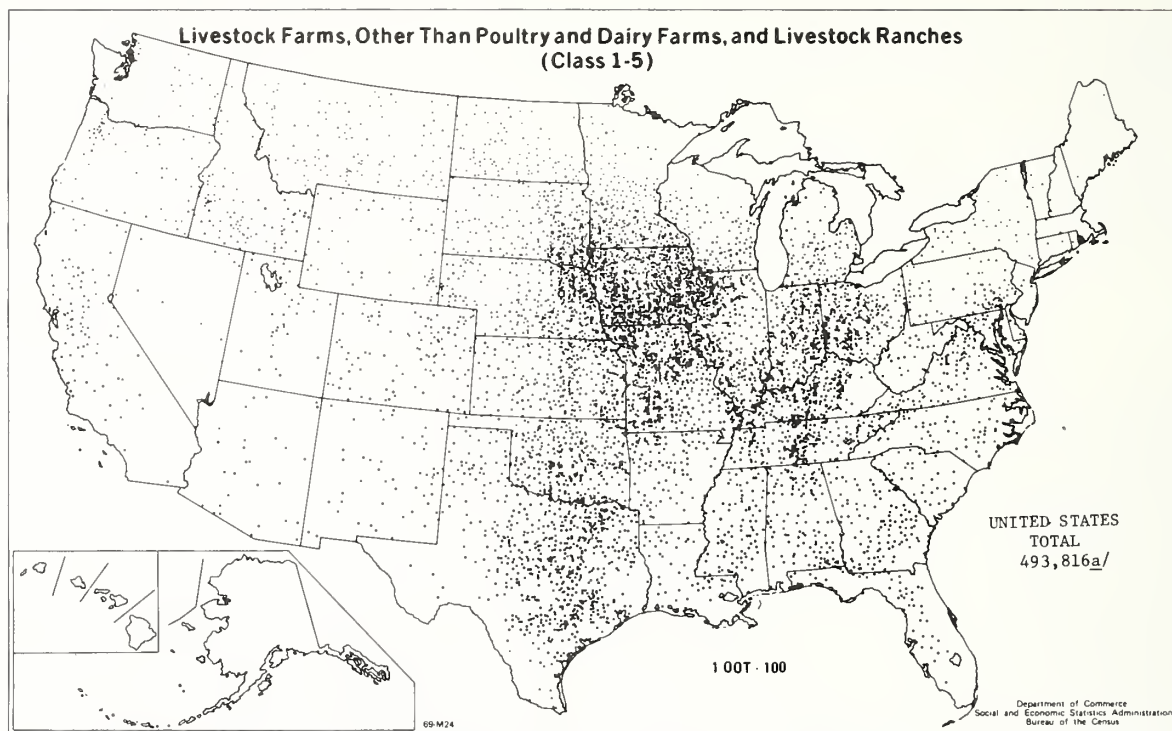
<sup>b</sup>Includes census type of farms cash grain and field crop. <sup>c</sup>Includes general farms, animal speciality and unclassified types.



Table 11—Financial condition of U.S. farm borrowers at banks, by type of farm borrower<sup>a</sup>

Farm type and item	Estimated Change:			Expected Change:		
	Mid-1976 to Mid-1977			Mid-1977 to Mid-1978		
	Decrease	Increase	Same	Decrease	Increase	Same
	<i>Percent of banks reporting</i>					
All type farms						
Net farm income .....	53	31	16	45	29	26
Net worth .....	34	43	22	37	31	32
Farms with repayment difficulties .....	18	43	39	18	46	36
Cash grain farms						
Net farm income .....	66	22	12	68	12	20
Net worth .....	40	38	22	54	14	32
Farms with repayment difficulties .....	14	54	32	10	63	27
Cow-calf (beef) farms						
Net farm income .....	55	24	21	19	48	33
Net worth .....	51	24	25	26	41	33
Farms with repayment difficulties .....	18	48	34	30	34	36
Dairy farms						
Net farm income .....	21	57	22	17	46	37
Net worth .....	8	72	20	10	60	30
Farms with repayment difficulties .....	25	14	61	23	17	60
Other livestock farms						
Net farm income .....	41	35	24	44	27	29
Net worth .....	20	58	22	30	30	40
Farms with repayment difficulties .....	25	39	36	18	48	33
Tobacco farms						
Net farm income .....	26	55	19	11	64	25
Net worth .....	17	47	37	3	56	41
Farms with repayment difficulties .....	17	23	60	19	12	69

<sup>a</sup>Commercial bank survey respondents in the ABA survey were asked to indicate the change that had occurred or that they expected to occur, in their borrowers' net incomes, net worths, and difficulties in making their loan payments.



<sup>a</sup>Farm numbers are based on the 1974 Census of Agriculture. The dots represent number of farms as of 1969; a similar map based on 1974 numbers will be published in a forthcoming census volume.

### Cattle Feeding Outlook for 1978

The financial condition of cattle feeders is expected to improve somewhat in 1978. However, the expected improvement is not based so much upon the belief that income to cattle feeders will be high but that feed grain prices will be lower.

The number of fed cattle marketed is expected to increase by about 3 to 5 percent in 1978 but total beef production is likely to be down somewhat due to the reduction in nonfed beef slaughter as liquidation of the herd ceases and fewer cull cows and heifers are sold. If this condition prevails, the price of fat cattle should rise from the low \$40's per cwt. in the first quarter to the mid \$40's by the end of the year. There are some uncertainties, particularly in connection with feeder cattle prices which may increase to their highest level in several years as the liquidation phase of the cattle cycle winds down.

In the event that higher feeder cattle prices prevail and more cattle are placed on feed in 1978, the demand for loan funds by cattle feeders will increase significantly. Although average total operating costs on a per head basis might be up only by 5 percent in 1978, the increase in the number of cattle fed will likely push total capital requirements up over 15 percent. Nevertheless, officials of financial institutions expect returns to cattle feed-

ing to be up in 1978 and appear to be willing to meet the increased demand for loans.

### 1977 Financial Conditions

Although 1977 has been much improved over 1976, many producers continued to experience some losses in 1977. Most of the time since late 1973 cattle feeders hardly covered costs of feed and feeder animals. Overall, cattle feeders have bid less for feeder cattle, fed to lighter weights with quicker turnover, and put fewer cattle through feedlots. In spite of low or negative returns, cattle feeders in 1977 began bidding up feeder prices, and increased placements. The higher feeding levels in 1977 were in response to the lower feed prices and expectations of increases in fat cattle prices.

Many cattle feeders have other sources of income and fortunately this income has been increasing in recent years and has resulted in individuals in the industry being somewhat less severely hurt than otherwise would have been the case. However, because of the losses associated with feeding, feedlots have closed and/or changed hands during this period.

### Cow-Calf (Cattle Raising) Outlook for 1978

For 1978, the financial conditions of cattle raisers likely will improve from the depressed lev-

els of 1977 and the previous 2 years. Prices for feeder calves are expected to improve as the liquidation phase of the cattle cycle bottoms out and producers begin to hold more heifers for herd replacement and expansion. If pasture conditions are average or better, then spring quarter feeder calf prices should average some 20 to 25 percent above those of 1977. Also, if fed cattle prices increase through 1978 as expected, increased demand for feeder calves will help strengthen calf prices.

Financial institutions much improved financial conditions for cattle raisers in 1978. Some 81 percent of the surveyed bankers indicated that net farm earnings would likely increase or remain the same in 1978 compared to those of 1977. Also, nearly two-thirds of the bankers surveyed indicated that loan repayment difficulties would decrease or remain the same as in 1977. These banks also indicated that they expect a substantial increase in the demand for loans to meet general operating expenses and feeder cattle purchases. No shortage of loan funds is anticipated in meeting this demand.

#### 1977 Financial Conditions

While the financial conditions of cattle raisers appear to be slightly improved over those of 1976, the industry continues to experience its third year of relatively low or negative net earnings. In addition, drought has caused poor pasture conditions in several parts of the country, especially in the West and Southeast. Producers in these areas have been forced to sell off a larger than usual number of calves, cows and nonfed steers and heifers because of high maintenance costs for feed and pasture. Although poor winter grazing conditions in late 1977, could cause continued liquidation of cattle numbers, calf prices during the last half of 1977 are 6 to 8 percent above those of 1976, and it appears that the overall heavy liquidation of cow and heifer stocks of the previous two years is subsiding.

Lenders indicate that a number of livestock producers are having lower net farm income, lower net worth, and greater repayment difficulties in 1977 as compared to 1976. However, 65 percent of all lenders surveyed indicated that the overall quality of their loan portfolio was the same or improved over that of 1976, and only 9 percent of the banks indicated an increased level of losses or charge off of farm loans. A slightly higher proportion of lenders in the Western and Great Plains States—where drought conditions have been more severe—reported a higher level of farm loan losses.

In spite of the depressed financial conditions of the past few years, most livestock producers have been able to avoid foreclosure, and lenders in general have continued to provide loan funds for regular borrowers. An Emergency livestock loan program of the FmHA, started in 1974, is still operative. This program has made available guaranteed loan funds through private lenders to some cattle feeders and cow-calf producers to continue their operations. As of September 1977, some 7,200 producers had obtained loans of about \$950 million through this program. Less than 2 percent of all livestock producers had a loan under the program.

#### Hog Outlook for 1978

The economic situation for hog producers in 1978 is not likely to be as good as in 1977. The production cycle for pork is still on the upswing. The current high hog-corn ratio, highest since 1973, could increase production enough to bring hog prices down to the low \$30's per hundredweight by the end of 1978. While this low price is somewhat uncertain due to expected lower production of beef in 1978, larger hog inventories suggest that relatively high pork production levels will exist well into 1978. Under these conditions, a 15 percent or more reduction in slaughter hog prices from the 1977 average appears likely. The 1977 average price for slaughter hogs was about \$40 per cwt.

Hog producers will require more capital financing in 1978. If for no other reason, lower

Table 12—Loan portfolio condition of cow-calf beef producers who borrow at commercial banks<sup>1</sup>

Item	Estimated change:			Expected change:		
	Mid-1976 to Mid-1977			Mid-1977 to Mid-1978		
	Decrease	Increase	Same	Decrease	Increase	Same
	<i>Percent of banks reporting</i>					
Overall quality of loans . . . . .	35	28	37	18	37	45
Rate of renewal or extension . . . . .	12	45	43	23	28	49
Refinancing of short-term debt to longer term mortgage debt . . . . .	6	49	45	12	37	51
Dollar losses on farm loans (charge-offs) . . . . .	15	9	76	19	10	71

<sup>1</sup> Data were obtained from a survey conducted by the ABA.



Table 13—Loan portfolio condition of other livestock producers who borrow at commercial banks<sup>1</sup>

Item	Estimated change:			Expected change:		
	Mid-1976 to Mid-1977			Mid-1977 to Mid-1978		
	Decrease	Increase	Same	Decrease	Increase	Same
	<i>Percent of banks reporting</i>					
Overall quality of loans .....	19	19	51	25	25	50
Rate of renewal or extensions .....	13	46	41	32	34	34
Refinancing of short-term debt to longer term mortgage debt .....	17	9	74	19	53	28
Dollar losses on farm loans (charge-offs) .....	17	9	74	15	15	70

<sup>1</sup> Data were obtained from a survey conducted by the ABA.

income to pork producers from their grain and soybean production will result in additional financing needs for raising hogs. Lenders in all important hog and grain producing States expect farmers to need more loan funds in 1978. Some institutional representatives predicted that commercial banks would have to reduce their loan levels in 1978 due to lower deposits caused by lower farm income from 1977 grain crops.

An increasing portion of hogs produced in confinement increases the rigidity of supply. There is less reason for the typical seasonal variations resulting from hogs produced on pasture during the spring and fall to complement crop production. Also, a relatively higher proportion of the cost falls into the fixed, as opposed to the variable category, and producers will tend to stay in business over swings in hog prices. The consequences of these adjustments in hog production could, over the long-run, lead to similar types of financial problems that currently face the cattle feeding subsector.

#### 1977 Financial Conditions

The 1977 production year was a relatively good year for hog enterprises. Hog farmers can be put in the three general classes: (1) commercial grain and hog farmers who have businesses of sufficient size to be efficient and generate large volumes of production with relatively good incomes when product prices are favorable, (2) specialized single enterprise hog operations, and (3) the small operators who do some farming but largely at the subsistence level, or part time.

These three general categories of hog farmers have greatly different financial conditions and production problems. In terms of the value of their production assets, larger commercial hog and grain farms developed good financial positions during a few years prior to 1977. These producers turn out relatively large volumes of hogs and grain. Hence, they make money on either corn production or pork production, or both. Since much of the income of these hog producers is associated with grain production they fared poorly in 1977, but better than

specialized grain producers. As a result of high production costs and low grain prices received, these producers in 1977 are in poorer financial condition than a year ago.

Specialized single enterprise hog operations, especially large ones that must buy all of their inputs are subject to high risks with fluctuations in prices. Much of the time they may experience severe year-to-year differences in income, because they are not associated with significant grain production. These specialized operations have "weathered the storm" for the present. Due to low grain prices these operations fared better than hog-grain farmers in 1977 and, because of low feeding costs they may fair well in 1978.

The farmers with small hog enterprises who have relatively small, unproductive farm units face an entirely different set of financial conditions and production problems. They are greatly stressed by the price-cost squeeze especially if they have no off-farm income sources. They are especially damaged by the increasing cost of purchased inputs. They do not have the volume to justify the costs of many of the production assets effectively used by the large volume operators and cannot get the price benefits of volume purchases. The high cost of inputs and capital needs probably head the list of problems faced by these producers.

#### Sheep and Lambs Outlook for 1978

In spite of some problems, the general financial outlook for producers still in the sheep business is bright. Even though the financial conditions for sheep and lamb producers will continue favorably in 1978, the number of sheep and lambs on farms in the U.S. will apparently continue to decline. The level of sheep and lamb slaughter in 1977 will again prevent any buildup in the breeding flock. The continued decline in numbers will help maintain prices at or near favorable levels.

The demand for loan funds among many western sheep producers in 1978 will depend upon rainfall and moisture conditions. A major problem to producers in the western areas has been the pro-

longed drought. Higher production costs, additional financing, and lower returns are associated with these drought conditions.

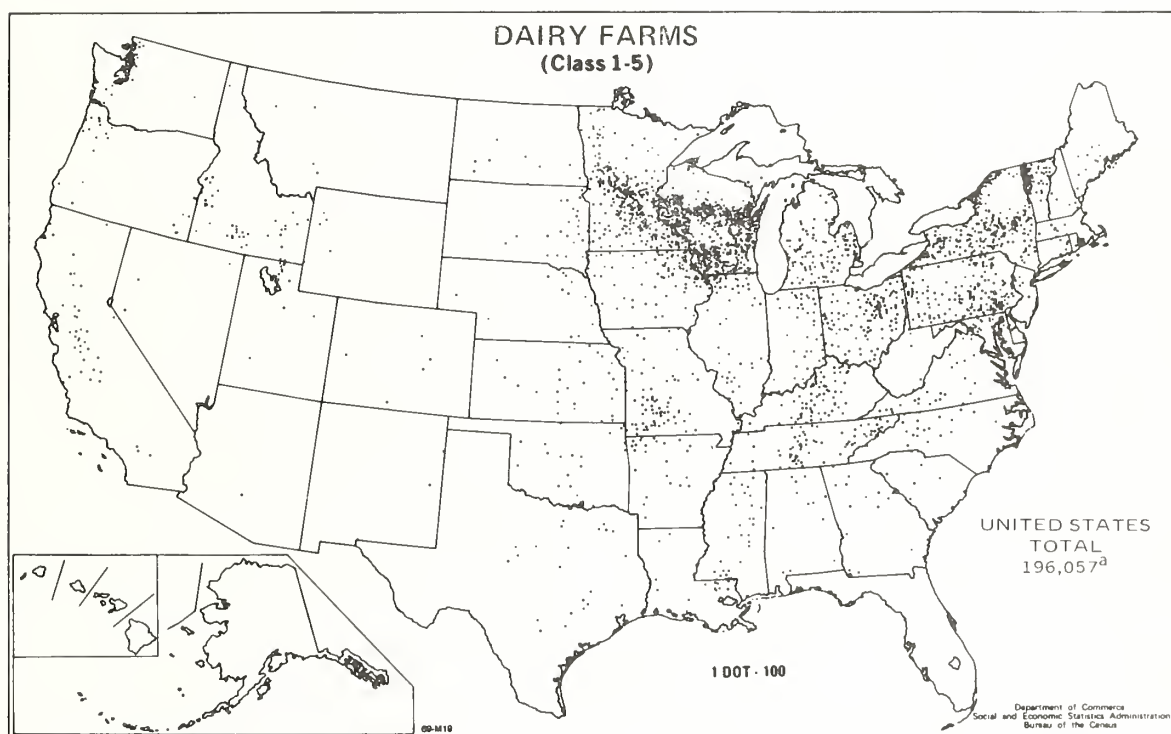
#### 1977 Financial Conditions

Favorable lamb and wool prices during the past several years have kept sheep production a profitable business. In general, the increase in production costs have been more than offset by the higher prices for lambs. Some possible problems exist in the west where the production of range feed, the principal source of nutrients for sheep in this region, has been reduced by the prolonged lack of moisture. Some producers have had to purchase large quantities of high-priced hay as insurance against continued drought.

Although the sheep industry appears to be in a

relatively sound financial position, there are farm income problems associated with inadequate size operations and other problems inherent with sheep production. In a recent ERS study (Agricultural Economics Report No. 345), it was found that in the 17 Western States, where about 80 percent of the U.S. sheep are raised, 59 percent of the producers had small size operations of less than 50 head—accounting for only 8 percent of all sheep.

Larger size commercial operations—with more than 50 head—accounted for 41 percent of all operators and produced almost 92 percent of all sheep. Many of these producers have substantial equity positions, suggesting a sound financial base. However, a year or two of unprofitable operations could cause many producers, particularly older ones, to shift to other enterprises or to retire and sell out.



<sup>a</sup>Farm numbers are based on the 1974 Census of Agriculture. The dots represent number of farms as of 1969; a similar map based on 1974 numbers will be published in a forthcoming census volume.

#### Dairy Outlook for 1978

Milk production in 1978 is expected to increase moderately from the relatively high 1977 level, and milk prices to average considerably higher. On the basis of higher milk prices and larger marketings, gross dairy income in 1978 will post substantial gains over 1977. With lower feed costs and relatively small increases expected in prices of most

production items, net income to dairy enterprises likely will be more favorable in 1978 over this year. However, with much of the improvement due to lower feed costs, dairymen who produce their own feed grains may not benefit as much as those purchasing feed.

The Food and Agriculture Act of 1977, enacted in late September, requires a milk price support level of not less than 80 percent of parity through

March 31, 1979 (then the minimum support level reverts to not less than 75 percent of parity). It also requires that the support level be adjusted semi-annually through March 31, 1981, to reflect changes in the parity index. These support programs likely will forestall rapidly bringing supplies back into balance with demand. With the large stocks of dairy products already on hand and the expected increases in milk production, prices received by farmers for milk likely will be near the present support level at least through the spring of 1978, but will average considerably above those of early 1977 because of the higher support price.

A recent survey of lenders and others in dairy areas indicated a relatively optimistic 1978 financial outlook for dairy farms, especially as compared with other farm types in dairy areas (table 14 and 15).

### 1977 Financial Conditions

Most dairy farmers had another relatively good year in 1977. Cash receipts from dairying, which dropped below year-earlier levels in December 1976,

remained under the previous year during the first quarter of 1977 before moving above year earlier levels in April. With the gains from a year earlier in dairy income likely increasing in late 1977, cash receipts from sales of milk and cream could reach \$11.8 billion for the year, up from \$11.4 billion in 1976.

Production costs in 1977 continue to exceed last year's, although the rate of increase has lessened. The index of prices paid for production items was running at a rate of about 2 percent above a year earlier in the third quarter, compared with rates of 4 and 5 percent during the first and second quarters of the year. Both dairy feed concentrate and hay prices were below 1976 levels during July-September. Production costs this fall, other than feed, probably continue above a year ago.

Farm lenders in dairy areas who were surveyed recently compared net earnings, net worth, debt repayment difficulties, and other financial indicators of dairy farms and other farm types in their area. In general, these reporters indicated that dairy farms had relatively good financial gains as compared with other major farm types in 1977.

**Table 14—Loan portfolio condition of dairy producers who borrow from commercial banks as reported in a survey of commercial banks in dairy farming areas<sup>1</sup>**

Item	Estimated change:			Expected change:		
	Mid-1976 to Mid-1977			Mid-1977 to Mid-1978		
	Decrease	Increase	Same	Decrease	Increase	Same
	<i>Percent of banks reporting</i>					
Overall quality of portfolio .....	12	34	54	13	33	54
Rate of loan repayments .....	26	25	49	21	31	48
Rate of renewals and extensions .....	8	43	49	19	31	50
Rate of conversions or refinancings of short-term farm debts into longer term farm mortgage secured loans .....	5	39	55	8	38	54
Rate of delinquencies 30 days and over .....	19	19	62	14	16	70
Dollar losses on farm loans (charge-offs) .....	17	12	71	14	12	74
Risk of making farm loans .....	7	36	57	13	37	50
Amount of collateral required relative to size of loan .....	2	32	66	5	32	63

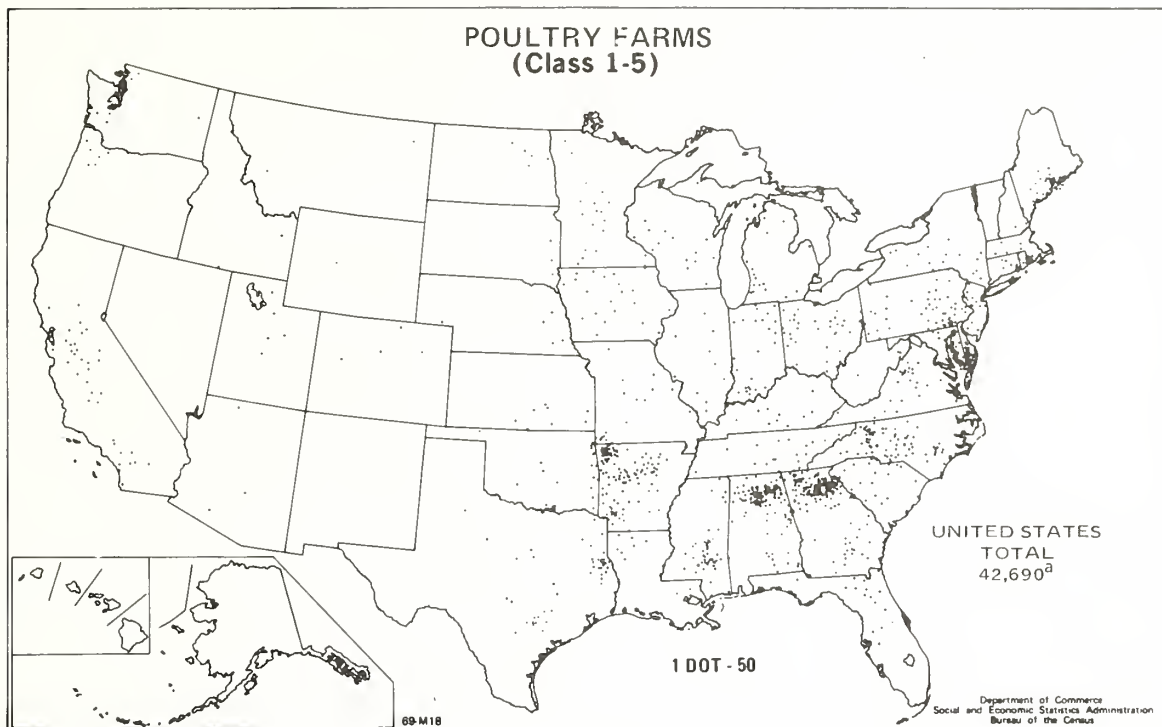
<sup>1</sup> Data were obtained from a survey conducted by the ABA.

**Table 15—Financial conditions in farming as reported in a survey of commercial banks in dairy farming areas**

Item	Dairy farms			Other farms <sup>1</sup>		
	Decrease	Increase	Same	Decrease	Increase	Same
	<i>Percent of banks reporting</i>					
Mid-1977 compared with mid-1976						
Net earnings .....	21	57	22	51	30	19
Net worth .....	8	72	20	32	44	24
Loan repayment difficulties .....	25	14	61	18	37	45
Expected mid-1978 compared with mid-1977						
Net earnings .....	17	46	37	37	32	31
Net worth .....	10	60	30	26	39	35
Loan repayment difficulties .....	23	17	60	18	35	47

<sup>1</sup> Farm types ranking second in importance to dairy farms in these areas. These were mainly producers of grains, beef, and other livestock. Data were obtained from the ABA survey.





<sup>a</sup>Farm numbers are based on the 1974 Census of Agriculture. The dots represent number of farms as of 1969; a similar map based on 1974 numbers will be published in a forthcoming census volume.

#### Poultry 1978 Outlook

*Broiler producers* will experience a relatively favorable year during most of 1978 but could be in a loss situation by the fall of 1978. Broiler prices in the first half of 1978 could average 2 to 4 cents below the 42 cents a pound for January-June 1977, but lower feed costs in 1978 likely will offset the expected lower level of broiler prices. Producers are expected to continue their expansion of recent years—perhaps 5 percent or more above a year earlier.

Net income prospects for *egg producers* in 1978 are not as favorable. Egg production during the first half of 1978 is expected to trend upward and average around 2 percent above 1977. Market prices for eggs likely will be well below year earlier levels. Lower feed costs will partially offset lower egg prices, but egg producers may be facing sizeable losses next spring.

Financial conditions for *turkey producers* will likely be slightly improved over most of 1977. Most producers were in a cost-price squeeze during the first half of 1977. However, lower feed ingredient prices and stronger turkey prices placed them in a profitable situation in late summer and fall. Producers are expected to respond to the increased profitability by stepping up production for first half of 1978 marketings. However, the reduced cold storage turkey stocks expected for January 1, 1978,

will partially offset the expected production gains in early 1978. Turkey prices in the first half of 1978 will likely decline seasonally from fall levels and average near a year earlier. However, producers' profits are expected to be better than during the first half of 1977.

The poultry and egg industries have become increasingly vertically-integrated over the years. This has shifted the risks of variable prices to integrators in exchange for a more stable return to producers.

#### 1977 Financial Conditions

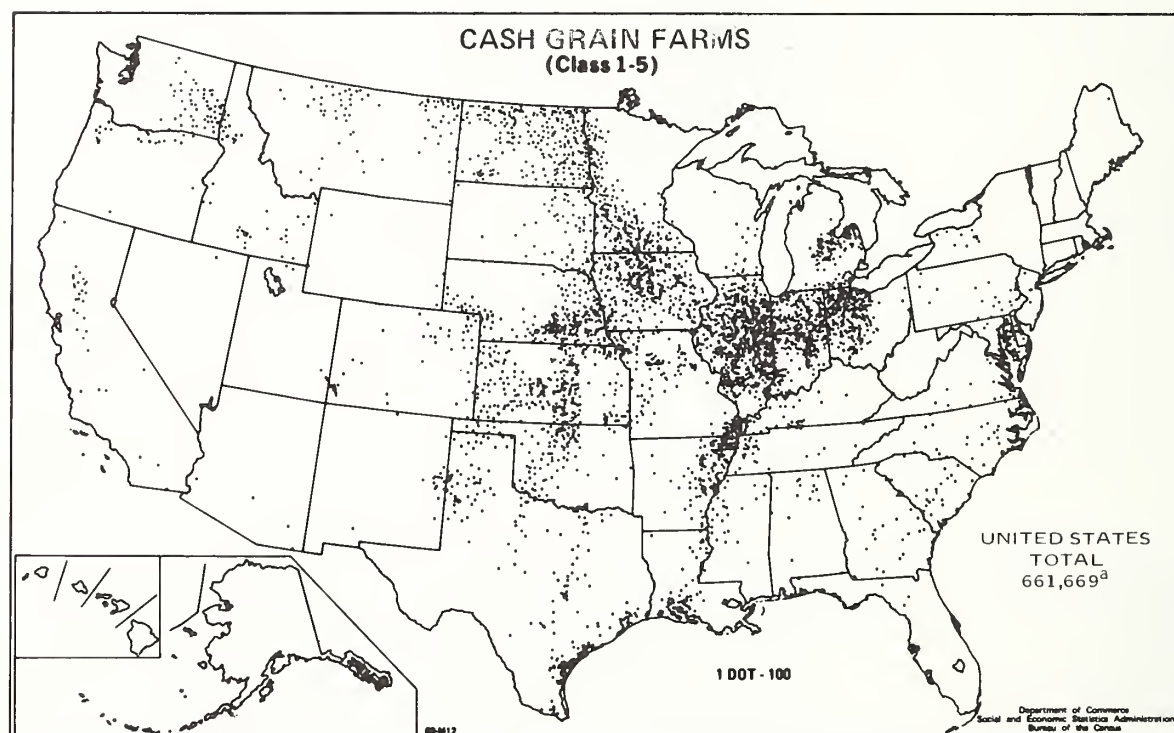
*Broiler producers* had an unfavorable first half in 1977 but financial conditions improved during the second half. Broiler output for all of 1977 likely will total around 3 percent above 1976's record level. Despite larger supplies of broilers, beef, and pork during the first half of 1977, broiler prices were relatively strong throughout the year, and feed costs during the summer slipped well below the previous level.

*Egg producers* had a very profitable first quarter in 1977, but were caught in a cost-price squeeze in the spring as feed ingredient costs rose sharply and egg prices dropped. In addition, producers were plagued by the extremely cold winter over much of the egg producing regions. Feed prices

declined during the summer while egg prices gained and generally exceeded production and marketing costs after midyear. Egg prices for all of 1977 are expected to average 5 to 7 cents a dozen below 1976, despite a small decline in output and increased demand for breeding and hatching use.

Financial conditions for *turkey producers* late this year have improved substantially from earlier

in 1977 and a year earlier. Declining feed costs have resulted in producers profits being generally positive, since late summer, after being negative for more than a year. Turkey output for all of 1977 will be down slightly from 1976's record, but prices may average 5 to 10 percent higher. However, higher feed costs during the first half of 1977 more than offset the increased turkey prices.



<sup>a</sup>Farm numbers are based on the 1974 Census of Agriculture. The dots represent number of farms as of 1969; a similar map based on 1974 numbers will be published in a forthcoming census volume.

### Cash Grain Outlook for 1978

Net farm incomes and net worths of cash grain producers have decreased during 1977, resulting in an increasing number of farmers with loan repayment difficulties. According to the September 1977 American Bankers Association Survey, this financial situation is expected to continue to worsen during 1978. The overall quality of loans is expected to decline with renewals or extensions, refinancing of short-term debt into long-term debt, and loan dollar losses increasing.

Yet, high loan demand continues because of the rapid increase in farm production costs during the past few years and the inability of many farmers to trim their debt due to the current low commodity prices. Although the present cost-price squeeze is considered serious by bankers, the majority of

farmers presently appear to be in reasonably good shape regarding their equity positions. However, the real worry is how long these present equity positions can absorb the stress.

Bankers have already adopted more conservative loan policies, including referring marginal borrowers to other credit agencies, working out individual cash flow programs, foreclosing, and requiring increased collateral and security agreements. The widespread mood of bankers at this time is to help farmers with their cash flow needs by financing short-term production costs while avoiding riskier intermediate and long-term loans.

The prospect of record crop production and larger grain stocks this fall continues to have an overriding influence on the agricultural outlook. If present production estimates are realized, feed grain supplies for the 1977/78 marketing year will

Table 16—Loan portfolio of cash grain producers who borrow from commercial banks<sup>1</sup>

Item	Estimated change:			Expected Change:		
	Mid-1976 to Mid-1977			Mid-1977 to Mid-1978		
	Decrease	Increase	Same	Decrease	Increase	Same
	<i>Percent of banks reporting</i>					
Cash Grain Producers						
Overall quality of loans . . . . .	26	24	50	33	20	47
Rate of renewal or extension . . . . .	11	52	37	13	59	28
Refinancing of short-term debt into longer-term mortgage debt . . . . .	5	47	48	7	58	35
Dollar losses on farm loans (charge offs) . . . . .	10	9	81	8	17	75

<sup>1</sup> Data were obtained from a survey conducted by the ABA.

be a record 230 million metric tons, 9 percent above a year earlier and well above expected usage. Domestic feeding is expected to be up moderately from last year, but total feed grain exports are still projected to be slightly below the large volumes of recent years. Consequently carryover stocks in 1978 likely will continue to build and feed grain prices may average near their respective loan rates. As a means of obtaining funds, farmers are expected to make heavy use of the Government loan program for major crops, still retaining control of their grain.

#### Wheat

Wheat production for 1977 in October was forecast at 2,027 million bushels, 6 percent less than last year's record crop. However, because of this year's huge beginning stocks, total supply for the 1977/78 marketing year will begin at a record 3,140 million bushels. The 1977/78 outlook for the U.S. market includes larger supplies, larger expected

domestic and export usage, an increase in carryover stocks, a 20 percent set aside program for 1978, and continued low prices.

Total demand is estimated to be up 15 percent, with domestic usage increasing 14 percent and exports increasing 16 percent. Wheat feeding is expected to be well above 1976/77, and the highest level since 1971/72. Wheat export estimates were recently increased, reflecting an expected increase in world trade, smaller exportable supplies in Argentina, and a decline in the Soviet crop. Regardless, total use is still less than this year's production, resulting in estimated carryover stocks of 1,182 million bushels, up 6 percent from last year.

Large amounts of wheat have already been placed under loan, and a substantial portion of eligible wheat has been placed in the 3-year reserve program. These developments and expected foreign purchases should further strengthen prices which have already advanced about 50 cents a bushel as of early November from the lows of this past summer.

Table 17—Wheat

Supply	1975		1976 (preliminary)		1977 (indicated)	
Area harvested (mil. acres) . . . . .	69.6		70.8		66.6	
Yield (bu.) . . . . .	30.7		30.3		30.4	
Production (mil. bu.) . . . . .	2,135		2,147		2,027	
Imports (mil. bu.) . . . . .	2		3		2	
Beginning stock (mil. bu.) . . . . .	435		664		1,111	
Total supply (mil. bu.) . . . . .	2,572		2,814		3,140	
Demand	1975/76		1976/77		1977/78 (estimated)	
Domestic use (mil. bu.) . . . . .	735		753		858	
Exports (mil. bu.) . . . . .	1,173		950		1,050	
Total demand (mil. bu.) . . . . .	1,908		1,703		1,908	
	1975/76	1976/77	1977/78 (estimated)	1977		
				Aug. 15	Sept. 15	Oct. 15
Average price received by farmers (\$/bu.) . . .	\$3.55	\$2.85	\$2.10-\$2.30	\$2.13	\$2.16	\$2.26
Loan support (\$/bu.) . . . . .						
Target price (\$/bu.) . . . . .	\$3.00-\$3.05					



Given these increasing wheat prices, the seasonal average price received by farmers is expected to be in the \$2.15 to \$2.35 a bushel range. The estimated National average for total production costs per bushel for all wheat for 1977 (excluding a land charge) ranges from \$2.20 to \$2.51. This is still well below the \$2.90 a bushel target price for 1977 and the \$3.00 to \$3.05 a bushel target price for 1978. However, the announced 20 percent wheat set-aside program for 1978 may also help bolster prices.

Farm income will be boosted by deficiency payments on allotment wheat production. The payment rate will probably be \$.65 per bushel (the difference between the \$2.25 loan and the \$2.90 target) on allotment production actually produced and \$.22 per bushel (based on the original \$2.47 target) for allotment acreage not actually planted.

### Rice

Rice production is forecast at 98.8 million hundredweight for 1977, down 16 percent from last year's 117.0 million hundredweight output. This reduction is due to a 12 percent reduction in area harvested and a 4 percent reduction in yield.

The U.S. rice market for the 1977/78 marketing year is characterized by a smaller total supply, larger expected domestic use, high levels of exports, prospects of substantial reduction in carryover stocks, and stronger prices.

Domestic use is likely to rise moderately, in line with the upward trends for food and brewers' use. Because of smaller crops in some major producing countries and continued expansion in world rice consumption, total exports are expected to exceed last season's high level.

Estimated carryover stocks for 1978 are at 25.2 million hundredweight. This is down 37 percent from last year, but still 255 percent higher than for

1974. Therefore, the average price received by producers during the 1977/78 marketing year is estimated to be in the range of \$8.00 to \$9.00/hundredweight, up from the previous year's average of \$6.63 and above the 1977 loan support of \$6.19. The estimated National average for total production costs per hundredweight for 1977 (excluding a land charge) ranges from \$6.55 to \$6.96. Rapidly rising rice prices have placed the necessity for deficiency payments in doubt. Further increases could pull the average for the first five months above the \$8.25 target price.

### Corn

Corn production for 1977 is forecast at a record 6,303 million bushels based upon conditions as of October 1, up 1 percent from last year's output. This increase came despite a 2 percent reduction in areas harvested. Prospects for the U.S. corn market for the 1977/78 marketing year include larger supplies, heavier feeding, lower exports, more stock building, and weak market prices.

Total utilization in 1977/78 is expected to be slightly larger than last year because of a modest increase in domestic usage offsetting a small decline expected in exports. Regardless, total use will still be less than this year's production, resulting in carryover stocks on October 1978 estimated to reach about 1,300 million bushels, up 48 percent from last year's. These factors add up to huge supplies which are causing downward pressure on corn prices.

The average price received by farmers during the 1977/78 marketing year is estimated to be in the \$2.00 to \$2.20 a bushel range. The estimated National average for total production costs per bushel for 1977 (excluding a land charge) ranges from \$1.48 to \$1.64.

Table 18—Rice

Supply	1975		1976 (preliminary)		1977 (indicated)	
Area harvested (mil. acres) .....	2,802		2,501		2,202	
Yield (pounds) .....	4,567		4,679		4,486	
Production (mil. cwt.) .....	128.0		117.0		98.8	
Beginning stock (mil. cwt.) .....	7.1		36.9		39.7	
Total supply (mil. cwt.) .....	135.1		153.9		138.5	
Demand	1975/76		1976/77		1977/78 (estimated)	
Domestic use (mil. cwt.) .....	40.2		42.8		45.3	
Exports (mil. cwt.) .....	56.5		65.6		68.0	
Total demand (mil. cwt.) .....	96.7		108.4		113.3	
Average price received by farmers (\$/cwt.) ..					1977	
					Aug. 15	Sept. 15
	1975/76	1976/77	1977/78 (est.)			Oct. 15
	\$8.34	\$6.63	\$8.00-\$9.00	\$8.02	\$8.12	\$8.74

Table 19—Corn

Supply	1975		1976 (preliminary)		1977 (indicated)	
Area harvested (mil. acres) . . . . .	67.2		71.1		69.5	
Yield (bu.) . . . . .	86.2		87.4		90.8	
Production (mil. bu.) . . . . .	5,797		6,216		6,303	
Imports (mil. bu.) . . . . .	2		2		1	
Beginning stock (mil. bu.) . . . . .	359		398		879	
Total supply (mil. bu.) . . . . .	6,158		6,616		7,183	
Demand	1975/76		1976/77		1977/78 (estimated)	
Domestic use (mil. bu.) . . . . .	4,049		4,062		4,330	
Exports (mil. bu.) . . . . .	1,711		1,675		1,550	
Total demand (mil. bu.) . . . . .	5,760		5,737		5,880	
	1975/76	1976/77	1977/78 (estimated)	1977		
				Aug. 15	Sept. 15	Oct. 15
Average price received by farmers (\$/bu.) . .	\$2.54	\$2.20	\$1.90-\$2.10	\$1.63	\$1.60	\$1.61

## Sorghum

In spite of a 6 percent reduction in area harvested, sorghum grain production for 1977 is forecast at 771 million bushels, up 7 percent from last year. Prospects for the U.S. sorghum market for the 1977/78 marketing year are similar to corn—increasing supplies, heavier feeding, lower exports, more stock building, and weak market prices.

Domestic usage is expected to be up 11 percent. Heavier sorghum feeding should result from the prospect of more cattle going into feedlots and weaker sorghum prices relative to wheat. Exports, on the other hand, are expected to be down 10 percent. In total, utilization will be less than production, resulting in a 71 percent increase in 1978 carryover stocks on top of a 75 percent increase in carryover stocks a year earlier. This brings the estimated beginning stocks for 1978/79 to 156 mil-

lion bushels. Such a huge supply is expected to maintain the downward pressure on prices that is already being exerted.

The average price received by farmers during the 1977/78 marketing year is estimated to be in the \$1.85 to \$2.05 a bushel range. The estimated National average for total production costs per bushel for 1977 (excluding a land charge) ranges from \$1.67 to \$1.93.

## Soybeans

Soybean production for 1977 is forecast at a record 1,647 million bushels, up 30 percent from last year. Not only was total area harvested up by 18 percent from last year, but also yield per acre increased by 11 percent. Combining this year's record production with beginning stocks also results in a record level of total supply.

Table 20—Sorghum

Supply	1975		1976 (preliminary)		1977 (indicated)	
Area harvested (mil. acres) . . . . .	15.5		14.9		14.1	
Yield (bu.) . . . . .	49.0		48.6		54.9	
Production (mil. bu.) . . . . .	760		724		771	
Beginning stock (mil. bu.) . . . . .	35		52		91	
Total supply (mil. bu.) . . . . .	795		776		862	
Demand	1975/76		1976/77		1977/78 (estimated)	
Domestic use (mil. bu.) . . . . .	514		435		481	
Exports (mil. bu.) . . . . .	229		250		225	
Total demand (mil. bu.) . . . . .	743		685		706	
	1975/76	1976/77	1977/78 (estimated)	1977		
				Aug. 15	Sept. 15	Oct. 15
Average price received by farmers (\$/bu.) . . .	\$2.37	\$1.95	\$1.80-\$2.00	\$1.47	\$1.46	\$1.49

Table 21—Soybeans

Supply	1975		1976 (preliminary)		1977 (indicated)	
Area harvested (mil. acres) . . . . .	53.8		49.4		58.1	
Yield (bu.) . . . . .	28.8		25.6		28.3	
Production (mil. bu.) . . . . .	1,546		1,265		1,647	
Beginning stock (mil. bu.) . . . . .	185		245		103	
Total supply (mil. bu.) . . . . .	1,731		1,510		1,750	
Demand	1975/76		1976/77		1977/78 (estimated)	
Domestic use (mil. bu.) . . . . .	931		843		925	
Exports (mil. bu.) . . . . .	555		564		610	
Total demand (mil. bu.) . . . . .	1,486		1,407		1,535	
	1975/76	1976/77	1977/78 (estimated)	1977		
				Aug. 15	Sept. 15	Oct. 15
	Average price received by farmers (\$/bu.) . . .	\$4.92	\$7.00	\$4.50-\$5.00	\$5.42	\$5.17

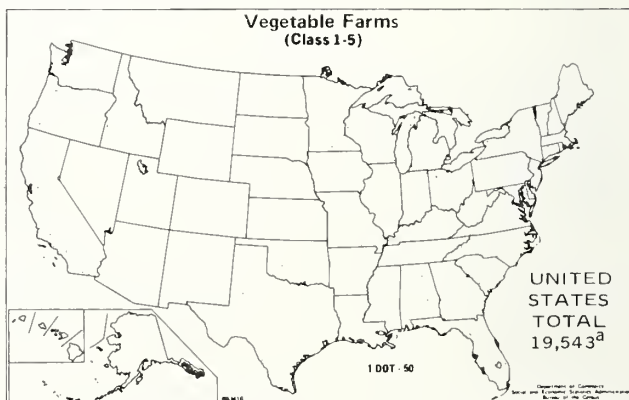
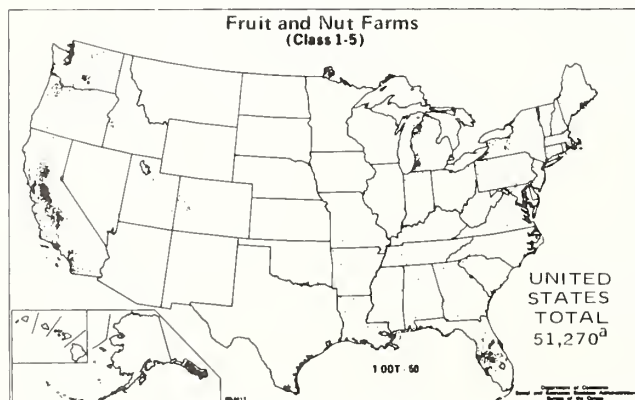
Prospects for the U.S. soybean market for the 1977/78 marketing year include larger supplies, higher utilization, increased carryover stocks, and lower prices.

Domestic usage is expected to be up 10 percent, and exports up 8 percent resulting in a total increase of 9 percent. However, total utilization is still less than this year's production, causing carryover stocks to be about doubled, up to 215 million bushels. Given this demand-supply relationship, the average price received by farmers for the 1977/78 marketing year is estimated to be in the range of \$4.50 to \$5.00 a bushel. This is down significantly from the \$7.00 a bushel average for 1976/77. The estimated National average for total production costs per bushel for 1977 (excluding a land

charge) ranges from \$3.10 to \$3.41. The falling prices reflect the increased competition from the 1977 Brazilian crop, the improved outlook for the 1977 U.S. crop, and reduced demand for high priced soybean meal.

Soybean production has been increasing rapidly in foreign countries, particularly Brazil and Argentina. These soybeans are coming into the world market in increasingly larger quantities and are filling some of the foreign demand previously filled by U.S. soybeans. Another concern is the large increase in world palm oil production and exports, particularly in Malaysia. Continued large increases in palm oil production will take place in the next five years because the trees to produce this increase have already been planted.

## FRUIT AND VEGETABLE FARMS



<sup>a</sup>Farm numbers are based on the 1974 Census of Agriculture. The dots represent number of farms as of 1969; a similar map based on 1974 numbers will be published in a forthcoming census volume.



While gross incomes for producers of nearly all fruits and tree nuts will average higher in 1978 than in 1977, net incomes may be the same or lower.

The effects of the California drought on energy costs and other production costs, plus the carryover effects of tree stress on orchards, will affect net farm income. The drought situation in California, Washington, Oregon, and Arizona has reduced carryover levels in water supply reservoirs causing increased dependence on more costly ground water supplies. There is no clear indication of the long-run impact of two drought years on future yields of fruit and nut crops. Nevertheless, land prices for fruit and nut producers appear to be continuing to increase, allowing land owners additional security for their loan requests. Lenders expect that loan demand will continue to be strong in 1978.

The long term outlook is for declining returns for citrus growers. Citrus production has trended upward as extensive new plantings during the 1960's increased in size and bearing surface. During the ten year period prior to 1974/75, total citrus bearing acreage increased from 881,000 to 1,205,100 acres—an increase of 37 percent. The large increases in acreage was accompanied by increases in average size and increased absentee ownership.

The Tax Reform Act of 1976 is having a profound impact on the flow of nonfarm equity capital into tax sheltered orchards and groves. By requiring development costs to be capitalized rather than charged off to current operating expenses, much of the incentive to invest has been eliminated. Trees, nuts and vines planted in the early 1970's are now coming into production, depressing commodity prices below those at the beginning of the decade. Syndication investors with non-recourse loans are increasingly abandoning tax shelter orchards to real estate lending institutions.

#### 1977 Financial Conditions for Fruit and Nut Farms

Financial conditions for fruit and nut producers have been very good in 1977. A larger production of *apples* has met ready markets in both the fresh and processing outlets. Processor stocks of apple products are at low levels because of last year's small freeze-damaged crop. A slightly smaller *grape* crop—most of which is in California—will also bring higher average prices in the fresh, wine, and raisin outlets. Similarly, *orange* producers are likely to receive higher average prices because of smaller production in 1977/78 and a smaller carryover of frozen concentrated orange juice from the freeze damaged 1976/77 crop. *Tree nut* production will be greater for all types of domestic tree nuts.

Financial conditions of vegetable growers are expected to be more stable in 1978 if there is no repeat of the severe weather conditions of 1977. As part of the economic background for 1978, production costs can be expected to rise further, but consumer demand is also expected to be strong. Demand to purchase farmland for urban development is anticipated to result in continued increases in land prices.

Growers of processing tomatoes experienced a good financial year through forward production contracts and near record production, although water costs were sharply higher in 1977. With large supplies of tomatoes and tomato products, and nearly average supplies of frozen vegetables, contract prices for the 1978 season are expected to be the same to slightly lower than this season.

Some uncertainties were created for winter vegetable producers in California's Imperial Valley by a U.S. Appellate Court ruling in July, which made the 160 acre limitation applicable to that valley's land owners. Although appeals will be made to the Supreme Court, long-term investments in drainage and land leveling have ceased. Lending institutions have revalued farm land based on estimates of the Department of Interior's approved land sales prices. Therefore, long-term capital loan funds will probably be limited until the future land ownership question is more clear. This condition may continue until the Supreme Court renders a decision in the case, or Congress acts to modify or rescind the 1902 Reclamation Act.

#### Financial Conditions for Vegetable Producers in 1977

Although costs have risen, gross income of vegetable producers in 1977 has generally improved over 1976. Even with sharply curtailed winter fresh vegetable production, the total farm value of winter crops in 1977 jumped 16 percent to \$368 million. This meant that some growers were fortunate while other sustained heavy losses in both Florida and the Rio Grande Valley of Texas. The farm value of spring vegetables was also larger than 1976, reaching \$516 million this year.

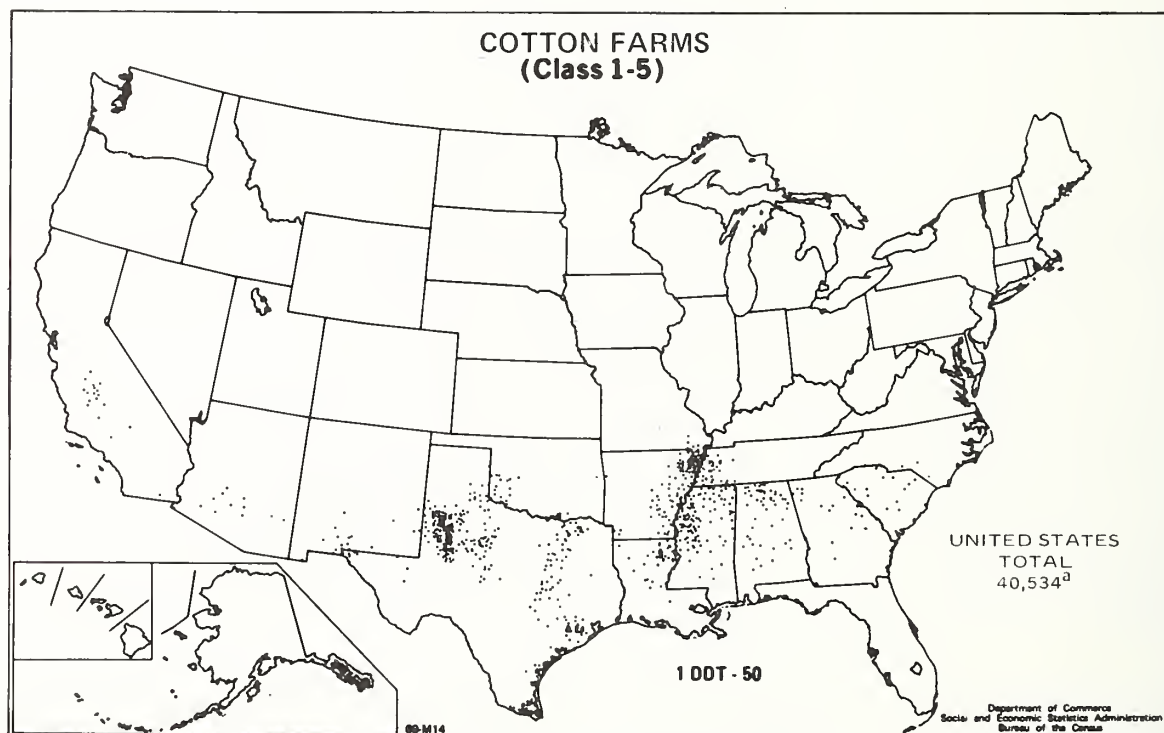
Fresh market vegetable prices the first half of 1977 averaged sharply higher than a year earlier—the result of the disastrous freeze in Florida late last January. Several winter vegetable producers suffered severe losses, and many replanted only to find sharply lower spring prices when their crops coincided with others elsewhere in Florida. Late spring Florida tomatoes and cucumbers competed with offerings from South Carolina, Texas, Mexico, and Arkansas and prices for these crops were disappointing to small growers.

The index of prices received by growers for fresh vegetables tumbled from 270 to 185 between March and May this year (1967=100). For the third quarter, the index of prices received by growers was at 165, one point less than a year earlier.

The Western drought had little net effect on the production of fresh vegetables. Excellent weather for summer and fall vegetable production provided ample supplies especially of iceberg lettuce from the coastal valleys of California. However, grower prices were depressed to near unit harvest cost.

Those growers, with geographically and seasonally diversified operations, improved their financial position with other fall crops, receiving a more favorable mix of prices.

Lenders in vegetable producing areas of the upper mid-West and New England project few loan repayment difficulties in these areas. Land values and cash rents for high quality vegetable land continue to increase, in part, due to increasing pressures to develop land for residential and other non-farm uses.



<sup>a</sup>Farm numbers are based on the 1974 Census of Agriculture. The dots represent number of farms as of 1969; a similar map based on 1974 numbers will be published in a forthcoming census volume.

### Outlook for 1978

The financial situation for cotton farmers in 1978 is unlikely to improve unless world use and demand of cotton pick up. Rising production costs and relatively low prices received for lint and cottonseed will push more of the production out of the Southeast and parts of the Delta States westward where it can be produced more efficiently. Suitable livestock enterprises and alternative crops, such as corn and soybeans in the Southeast and soybeans and rice in the Delta States, will affect the financial condition of farmers in those areas more than formerly. In Texas and Oklahoma, which will produce about 40 percent of this year's cotton crop, there are also alternative and complementary farm and ranch enterprises (table 22). The same is true

for parts of Arizona and California where about 30 percent of the cotton crop will be produced. It is unrealistic, therefore, to speak of cotton farmers as a separate group totally dependent on that crop alone.

A large increase in U.S. cotton production in 1977 was one reason for the sharply lower harvesttime prices than received in 1976, dropping below production costs for many producers. The CCC loan rate of 44.63 cents per pound (basis SLM 1-1/16 inch) for 1977 cotton is not far below the current price for many producers; thus more farmers than usual are expected to put cotton in the CCC loan program, and hold for possible higher prices before loans mature. Moreover, producers may now extend their CCC cotton loan an addi-



Table 22—Upland cotton: Acreage, yield per acre, production and average cost of production by region, 1976-77

Item	Region							
	Southeast		Delta		Southwest		West	
	1976	1977	1976	1977	1976	1977	1976	1977
Acreage (1,000 acres) . . . . .	1,196	1,227	3,240	3,166	4,835	6,370	1,524	1,916
Yield (lbs. per acre) . . . . .	403	397	392	497	348	375	1,067	1,044
Production (1,000 bales) . . . . .	1,003	1,016	2,645	3,275	3,482	4,980	3,388	4,167
Production costs <sup>1</sup> (cents per pound of prod.) .	68	82	58	54	45	47	33	41

<sup>1</sup> Excludes land charge.

tional 8 months to a total of 18 months, thereby expanding their marketing options.

Because of higher costs and lower prices this year for corn and soybeans as well as for cotton, the liquidity position of many cotton producers going into 1978 will not show much improvement from a year earlier. Southeastern farmers hard hit by drought and low yields per acre will probably experience the most severe financial conditions. Many Delta growers will have gone through the fourth consecutive year of poor income from cotton due chiefly to bad weather and low yields during 1974, 1975, and 1976 and low prices in 1977. For growers farther West, those who rely on irrigation will be faced with questionable and probably more expensive water supplies in many areas.

An expected hike in minimum wage rates effective January 1, 1978, will probably be a higher cost item in the coming year. Also, if proposed cotton dust standards in work areas go into effect, ginning costs will likely increase to cover investments in equipment that ginners must make in order to comply.

Cotton prices should be more stable for the next 4 years under provisions of the Food and Agriculture Act of 1977. An average CCC loan rate of 44 cents per pound (basis SLM 1-1/16 inch) for 1978 cotton has been announced. The target price for 1978 is set at a minimum 52 cents per pound and will be adjusted in future years based on changes in the variable costs of production. The maximum deficiency payment in 1978 is \$40,000 per producer (up from \$20,000 in 1977) for the difference between the market price and target price or between the CCC loan rate and target price, whichever is smaller. If deficiency payments are made in 1978, they likely will be only a few cents per pound.

Farm lenders will likely react favorably to the Act's pricing provisions. Although there is no guarantee of profitable price levels, there will be an effective floor. There is no indication that lenders will not continue financing cotton producers in 1978 in traditional fashion. Doubtless some producers in short liquid position will request refinancing or extensions of notes. But in practically all areas, lenders' loan funds are adequate, except possibly

the Farmers Home Administration (FmHA), for servicing farmer loan demand. FmHA emergency loans have been large in areas hurt by drought.

Chances are good that total cotton acreage will not be as large in 1978 as this year. Nevertheless, in the lower cost regions some farm enlargement will continue with the possible exception of parts of California where there is concern about enforcement of farm size restrictions. Although cotton land prices may not increase at rates of the last several years, they likely will not decline.

#### 1977 Financial Conditions

Results from surveys of lenders indicate that most cotton farmers failed to improve their financial condition with their 1977 crop. Nationwide, the lower prices received during the harvest season were almost offset by a 26-percent larger production giving a total value of production near the \$3.3 billion value for 1976. Production costs per pound harvested in 1977 are expected to remain about the same as in 1976.

The drought reduced yields per acre of Southeastern growers were coupled with prices substantially below costs of production per bale. While Delta States cotton producers had much better yields per acre than in 1976, prices received were in many cases at or below production costs. In Texas, cotton acreage and yields increased for the third straight year, although yields were poor in the Blackland area. Production in California and Arizona was somewhat higher as slightly lower yields per acre than in 1976 failed to offset the one-fifth larger acreage. The value of cottonseed barely covered the cost of ginning in most areas.

Forward sales contracts were used much less in 1977 than in 1976 (table 23). Through September of this year, about 21 percent of the 1977 crop was contracted for future sale, compared with 49 percent of the 1976 crop at that time a year earlier. At planting time in 1977, it appeared that cotton prices at harvesttime would be quite favorable, and created a reluctance among growers to contract ahead of harvest at what seemed to be unattractive contract prices of 60 or 65 cents per pound. Since

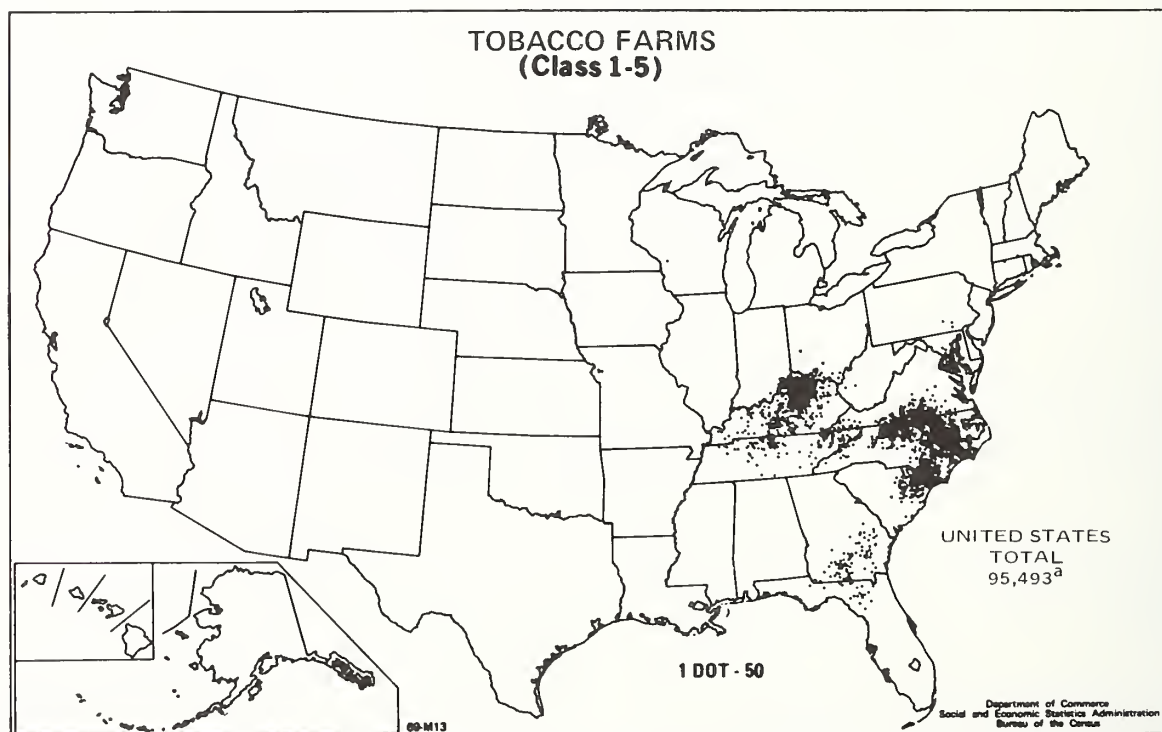
Table 23—Average price received for upland cotton by farmers and volume of upland cotton contracted for sale by region, by months, 1976-77

Month	Average price received by farmers on 15th of month U.S.		Volume of upland cotton contracted for sale by end of month, 1976 and 1977									
			Southeastern		South central		Southwestern		Far West		U.S.	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
	<i>Cents per lb.</i>		<i>Percent</i>									
February .....	51.7	63.9	14	3	29	7	3	12	22	15	15	12
March .....	52.7	69.8	15	6	30	13	4	15	25	19	16	16
April .....	53.9	67.8	27	7	54	14	7	15	40	19	29	16
May .....	57.5	67.2	40	7	65	14	9	16	48	19	36	17
June .....	66.9	63.2	49	7	71	16	13	18	59	21	42	19
July .....	68.8	63.1	50	8	73	16	22	18	65	32	47	19
August .....	58.9	60.9	52	9	73	17	23	19	65	32	48	20
September .....	64.5	59.1	52	9	73	19	23	19	69	34	49	21
October .....	62.5	54.7										

then, however, cotton prices have dropped sharply.

There are no indications that cotton producers were not served reasonably well by lenders in 1977. However, somewhat more than the usual number of cotton farmers are in debt situations that are

calling for renewals or extensions of loan repayment dates. For most, the equity in farmland, equipment, and livestock is such that little difficulty in satisfying lenders' requirements is expected.



<sup>a</sup>Farm numbers are based on the 1974 Census of Agriculture. The dots represent number of farms as of 1969; a similar map based on 1974 numbers will be published in a forthcoming census volume.

#### Outlook for 1978

The income and financial condition of tobacco producers should improve in 1978. While marketing quotas have not yet been announced prices should remain favorable. The support price, as presently

legislated, is geared directly to a cost of production measure as expressed by changes in the parity index for the last three years. This indicates an increase of about 7 percent over the price support level in effect for the 1977 crop. Outlays for produc-



Table 24—Financial conditions in tobacco farming as reported in a survey of commercial banks

Item	Mid-1977 compared with mid-1976			Expected mid-1978 compared with mid-1977		
	Decrease	Increase	Same	Decrease	Increase	Same
<i>Percentage distribution</i>						
Demand for farm loans						
General operating loans .....	0	86	14	0	72	28
Real estate loans .....	14	72	19	7	53	40
Net earnings .....	26	55	22	11	64	25
Net worth .....	16	47	37	3	56	41
Farms with repayment difficulties .....	17	23	60	19	12	69
Rate of loan renewals and extensions .....	13	37	50	15	33	52
Security requirements .....	0	31	69	0	34	66
Risk of making farm loans .....	6	28	66	0	34	66
Refinancing short-term debt into real estate debt...	0	29	71	7	41	52

tion will probably show modest increases in line with increases in prices of purchased inputs.

Although drought conditions will hopefully not recur during the 1978 growing season, the rather severe drought throughout the Southeast in 1977 will have an effect lasting into 1978. Many producers, already on unsure financial foundations in 1977, will have to convince lenders of their adequate farming abilities and sufficient repayment capacities in order to continue receiving financing. Others not as bad off may find it to their advantage to adjust the terms of their outstanding debt through refinancing or note extensions.

With the exception of FmHA, lenders in the tobacco growing areas report that loan funds will be adequate for farm financing. Most of them expect tobacco farmers' incomes and net worths to improve in 1978 and are willing to continue financing all but a few extreme cases (table 24).

#### 1977 Financial Conditions

Despite record prices, total net income from tobacco in 1977 declined sharply due to drought reduced yields from smaller acreages. Prices averaging around \$118 to \$120 per hundred pounds in August, September, and October 1977 were not enough to offset the 11 percent drop in production from 9 percent fewer acres. Although carry-in stocks were 9 percent larger than in 1976, total supplies after the 1977 crop is harvested will be about the same as a year earlier.

Most of the production decline is the flue-cured type which usually accounts for about 65 percent of the total market value. Burley accounts for about 30 percent, with the remainder made up of all other types.

Farm sales of flue-cured tobacco totaled around \$1.3 billion in 1977, about 10 percent below 1976. The bulk of the sales were made from farms where tobacco accounts for two-thirds or more of cash receipts. Usually corn and soybeans are the main secondary crops, and since these crops suffered low yields and prices, many tobacco producers are

caught in a low cash position.

The 1977 marketing quota for flue-cured tobacco was reduced 14 percent from 1976. But drought in the tobacco states lowered expected yields, causing total production to drop about 17 percent. Tobacco quality also suffered.

The 1977 net income picture (as compared with 1976 and 1975) for flue-cured producers is indicated in the accompanying table 25. Overall, 1976 was much like 1975. Although production in 1976 was below 1975's because of lower marketing quotas, the yield per acre was similar to 1975 and a higher price kept total cash receipts up. In 1976, production expenses per pound of tobacco produced were only slightly higher which resulted in a higher total net income of \$579 million, compared with \$524 million in 1975. But in 1977, with much lower production and considerably higher costs per pound, a sharply reduced total net income resulted even though growers received record high prices.

Reports from surveys of farm lenders, particularly banks, in the predominantly tobacco growing areas of the Southeast show that lower returns have not seriously damaged most borrowers financially. A relatively small percentage have been hurt so severely that the lenders will probably not continue their usual financing arrangements.

Table 25—U.S. flue-cured tobacco production, prices, and costs, 1975, 1976 and 1977

Item	1975	1976	1977 <sup>1</sup>
Poundage quota (mil. lbs.) .....	1,572	1,409	1,197
Acres (000) .....	717	667	593
Yield per acre (lbs.) .....	1,973	1,974	1,850
Production (mil. lbs.) .....	1,415	1,316	1,097
Price per lb. (dol.) .....	1.00	1.10	1.19
Cash receipts (mil. dol.) .....	1,412	1,453	1,305
Cost per lb. excl. land, management and allotment (dol.) <sup>2</sup> .....	.63	.66	.88
Net income per lb. to land, management and allotment (dol.) .....	.37	.44	.31
Net income for all growers (mil. dol.) .....	524	579	404

<sup>1</sup> Preliminary. <sup>2</sup> Tractor drawn priming aid and cured in bulk barn.

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